C A L I F O R N I A

OIL WORLD

General Library
Univ of Michigan
Ann Arbor, Mich
12910R

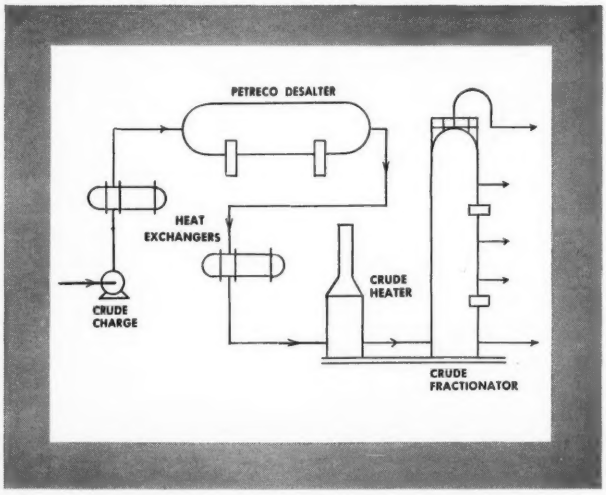
PETRECO®

THE UNIVERSITY OF MICHIGAN
OCT 9 1959
ENGINEERING LIBRARY

ALL ELECTRIC DESALTER eliminates SLUGS OF WATER and SALT PROBLEMS

IN WEST COAST REFINERY

Petreco Desalter Installation at Shell Oil Company Refinery at Wilmington, California, Installed Capacity 80,000 B/D.



PROBLEM

At crude tank switching time slugs of bottom water would often upset the crude unit.

RESULTS

The installation of a Petreco All-Electric Desalter removed these slugs of water and eliminated the upsets, as well as salt fouling.

PETRECO *Electric Dehydration* **PETRECO *Electrofining*** **PETRECO *Bender Sweetening***

**PETRECO is a registered trademark of Petrolite Corporation*

PETROLITE CORPORATION

PETRECO DIVISION
1300 East Burnett Street (P. O. Box 7216), Long Beach 7, Calif.
3202 South Wayside Drive (P. O. Box 2546), Houston 1, Texas

CANADA: Petreco, 4528 Stanley Drive, Calgary, Alberta
ENGLAND: Petrolite Limited, 46 Mount Street, London, W. 1.
VENEZUELA: South American Petrolite Corporation, Hotel Avila, Caracas

REPRESENTATIVES

BRAZIL: WERCO, Ltda., Avenida Rio Branco 57-s/1410-11, Rio de Janeiro D. F.
COLOMBIA: South American Petrolite Corporation, Calle 19, No. 7-30 Office 807, Bogota
ITALY: O. Wagner, 149 Via Nemorense, Apt. 1, Rome, Italy
JAPAN: Chiyoda Chemical Engineering and Construction Company, Ltd., Tokyo Building, No. 3, Marunouchi 2-Chome, Chiyoda-K Tokyo, Japan
KUWAIT: F. N. Dahdah, Box 1713, Al Kuwait
MEXICO: R. E. Power, Sierra de Mijes, No. 125, Mexico D. F.
NETHERLANDS: F. E. C. Jenkins, Hoefbladlaan 134, The Hague

COVERING
New Mexico
California
Wyoming
Montana
Colorado
Idaho
Utah
Western Canada

TWICE MONTHLY

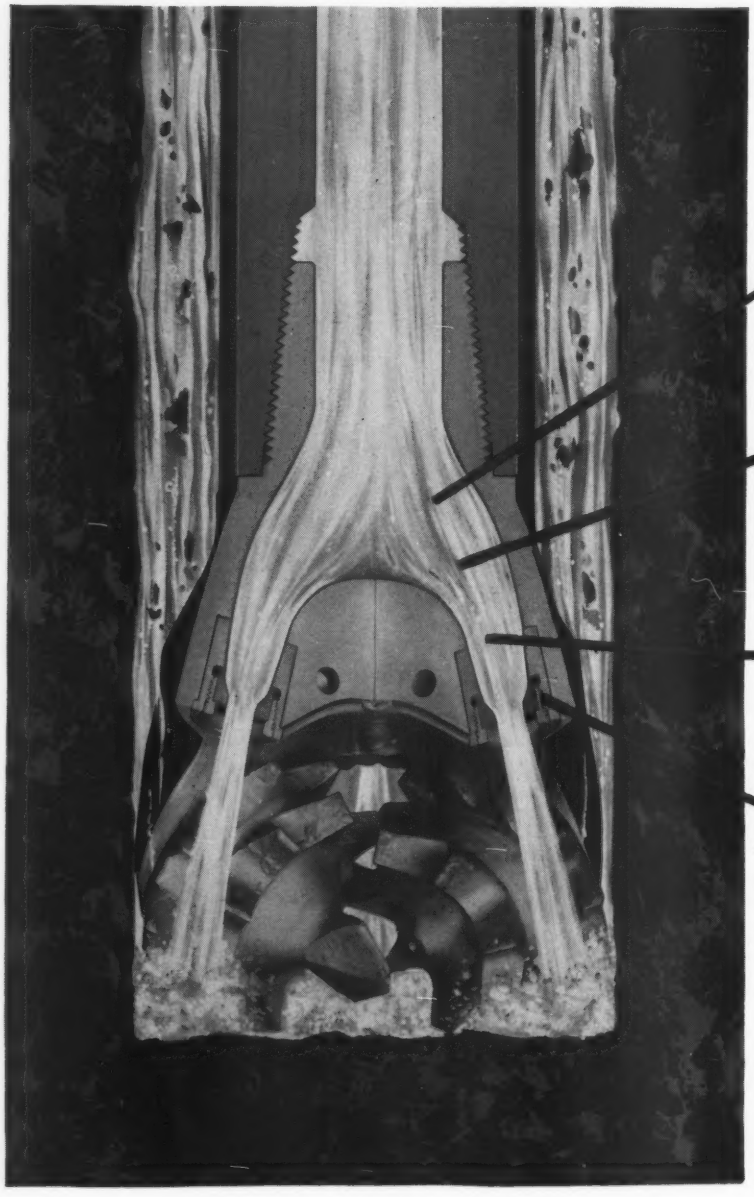
FIRST ISSUE

SEPTEMBER 1959

2nd Year
Vol. 52
No. 17

ONLY HCSmith

3-CUTTER JET ROCK BITS



give you...

STRAIGHTER SMOOTHER FLOW OF DRILLING FLUID

WITH MINIMUM PUMP PRESSURE

AND MAXIMUM JETTING ACTION

plus

FIELD-PROVEN THREADED FLOW NOZZLES FOR EASY INSTALLATION

HCSmith OIL TOOL CO.

Branches in Principal Oil Centers Throughout the World

COMPTON, CALIF. • ODESSA • HOUSTON • DALLAS • OKLAHOMA CITY • GREAT BEND • EDMONTON

CALIFORNIA
OIL WORLD
PUBLISHED TWICE A MONTH
By
PETROLEUM PUBLISHERS, INC.

KINZIE MILLER—President and Editor • RICHARD SNEDDON—Contributing Editor
LELA MONROE—Vice President • LARRY O. MILLER—Secretary and Advertising Manager
2404 WEST 7th STREET, LOS ANGELES 57, CALIFORNIA • DUnkirk 2-6218

BRANCH OFFICES
CHICAGO—FRED JONES & SON—Room 517, 205 W. Wacker Drive, Chicago 6
CLEVELAND—HOWARD F. McCLENAHAN—1900 Euclid Avenue, Cleveland 15

• FIRST ISSUE
SEPTEMBER, 1959
VOL. 52 • NO. 17
WHOLE NO. 2023
September 15th, 1959

California Oil World is published twice a month at 2404 West 7th St., Los Angeles 57, California. Second-Class Postage Paid at Los Angeles, California. Subscription price $1 per year in U. S. and possessions, $2 in foreign countries including Canada.

"Oil To The North"

An address by T. S. PETERSEN, president, Standard Oil Company of California, to the Pacific Northwest Trade Association, Fairbanks, Alaska; September 4, 1959

Good morning, gentlemen.

I must tell you how pleased I am to be here today, a part of this meeting and of this stimulating atmosphere. There is something almost electric in the air up here. It's too early for the aurora borealis, so I can only conclude the feeling I sense is the natural excitement which attends the birth of a new era, of being a part of a colorful and vigorous history in the making.

Although I have been here many times before, this is my first opportunity to visit Alaska since it became one of our United States, and I am happy to confirm again at first hand everything that has been said about its youth, its vitality and its promise. I'm rather proud that the company I represent recognized that promise a good many years ago.

Back in 1896 our company sent its first salesman into Alaska. By chance this was just a few weeks before gold was discovered on the Klondike and, as the gold fever spread down through Alaska, our people were on hand to serve the sourdoughs with kerosene and mining candles.

In 1900, when Nome became the focal point of the gold rush, we established our station at Nome. It's been in business ever since. Incidentally, in those days petroleum products used to be shipped in drums, and at the end of the season the drums had to be returned to Seattle for refilling. But our company changed all that when it built the first all-steel tanker on the coast—the S.S. LOOMIS—and pioneered tanker service direct to Alaska's docks.

Later on, people from our company were on hand to service the first

T. S. Petersen

trucks that rolled into Alaska in the early 1920's, and we fueled the first air mail flight here, in 1924.

Standard Oilers, as we call ourselves in the family, stayed on to become a part of the territory, and then of the new state. Curt Bradford, our manager here in Fairbanks, was born and raised in Alaska, as were many of our company employees in this area. The young geologist who heads our exploration office in Anchorage is the second generation of his family to hunt for oil in Alaska. So you can see that we have good reason to share Alaskans' enthusiasm over statehood.

At this time I also want to extend a very warm greeting to our good friends from Canada who are a part of this association and who are present here today. The Canadian West—no less than Alaska—has been and is of major importance to the petroleum industry, not to mention the strategic importance of both of these areas to the people of the North American continent.

The oil industry of the Canadian West, in fact, has passed through the stage of development that Alaska's oil may one day be approaching. So it is appropriate and practical to maintain this close tie between our two countries, and to exchange freely our knowledge and experience, as we are doing at this meeting.

In a broad sense, the Canadian experience in oil provides us with a case history from which to draw certain general conclusions about Alaska's oil future.

Oil exploration and development have been going on in Canada for more than a half-century, but the modern Canadian oil industry is relatively new. It dates—insofar as its most important commercial development is concerned—from the discovery of oil at Leduc, in central Alberta, in February of 1947.

That discovery climaxed an often discouraging search that had been set off by the discovery of the Turner Valley field in southwest Alberta eleven years earlier. In that eleven years, more than $100 million was invested by the oil industry in Canadian exploration, and one can only speculate how much longer the search would have gone on if Leduc hadn't come along to revitalize industry hopes.

Now, 12 years and $4.5 billion in expenditures later, the oil industry ranks first among Canada's mineral producers and last year produced oil

and gas valued at more than $400 million. According to estimates of the Canadian Petroleum Association, proved reserves of crude oil and other liquid petroleums stood at more than 3.6 billion barrels at the beginning of this year, despite the production of a billion barrels of oil since 1947. Natural gas reserves were over 23 trillion cubic feet, nearly 30 times greater.

Canada's industry today is capable of producing 50 times as much oil as it was able to produce 12 years ago. It has spawned one of the greatest pipe line systems in the world—5100 miles of crude oil and products lines and 6500 miles of natural gas lines.

Canadians are their own best customers for oil, too. Per person they are the second-highest consumers of petroleum in the world and, as a nation, the third largest consumer of oil. Since 1947 Canadian refining capacity has tripled—to 800,000 barrels daily—but only just enough to keep ahead of Canada's own demand.

The discovery at Leduc sparked a widespread exploration program that continues vigorously today. Though Alberta remains in the forefront of Canadian oil, development has since fanned out through the provinces of Saskatchewan and Manitoba and, more recently, to British Columbia. British Columbia has been fortunate in finding within its borders one of the world's great sources of natural gas. When the Westcoast Transmission line was completed in 1957, this gas became available in U.S. markets and interest in British Columbia's oil and gas development was stepped up further. Our friends from British Columbia who are here today can confirm that this development has had a very healthy economic impact, and promises to have more in the future. By way of an example, the relatively young oil and gas industry of British Columbia has generated more than $30 million in royalties and fees since the first gas well was brought in in 1951.

The swift expansion of Canada's oil and gas production has not been without its attendant growing pains. So rapidly has Canadian production been opened up in the Prairie Provinces and British Columbia that markets have simply not grown fast enough to absorb all of the productive capacity. At the outset of 1959, Canadian oil production was 549,000 barrels daily, about 54 per cent of the actual million barrel-a-day potential. This has disappointed some people who had hoped for a much more rapid absorption of Canadian oil into the market place, with resultant greater benefits to Canada's economy as a whole.

To this I can only offer as consolation that the oil industry everywhere shares this disappointment, for every oil-producing nation in the world today would like to be selling more oil. This is as true of the United States, Venezuela, Saudi Arabia, Kuwait, Sumatra and all the others as it is of Canada. But the market simply isn't there yet. The world's productive capacity, for the moment, has outstripped the ability of people to consume all of the oil that could be brought up out of the ground.

Historically, this is nothing new. We have been through the cycle of oversupply before, just as we have been through cycles of under-supply. In each instance, dire predictions have been made about the future of the oil industry—either that it would run out of oil, or that it would drown itself economically in a surfeit of unneeded and unwanted oil inventories. But in every instance the scales have swung back into balance, to confound the pessimists, and the oil industry has moved ahead to new heights of production and demand, just as it will again. Canada will certainly enjoy its proper share of the new markets that will eventually open up.

For the time being, we have as I say a situation in which potential production exceeds the world's capacity for consumption. We have two basic alternatives for coping with it. The oil-producing nations of the world can ignore the market realities and produce to capacity, or they can bide their time, sensibly gearing production to the level which can reasonably be absorbed.

Leading the way for Canada. Alberta has wisely adopted the latter approach by establishing a system of pro-rated production, as was done earlier in Texas and elsewhere. This approach to the problem of over-capacity assures that Canada's principal reserves will be protected from wasteful exploitation.

The vast reserves of Canadian oil in the ground today have a potential value in the billions of dollars—but only if they can be marketed, for prices that fairly reflect the cost of finding oil and which encourage further exploration and development. Were these reserves to be produced at a rate higher than the market could absorb, their potential value to Canadians would be largely lost for all time. Additionally, such wasteful production would be bound to have a depressing effect on exploratory activity and result in diminished reserves for the future.

Nothwithstanding the frustrations encountered in marketing growing production, the oil industry in Canada and in the other major oil-producing countries can take some comfort in the demand prospects which have been forecast for the next ten or fifteen years.

As you may know, our company and its affiliates engage in the oil business on a world-wide scale. To do this successfully we have to look far ahead in appraising market prospects, not merely to next year but well beyond the next decade and more.

Our present thinking about these prospects is decidedly on the favorable side. For North America, our economists are forecasting an increase in petroleum demand from the present level of 10 million barrels daily to 17 million barrels a day by 1975. For the Free World as a whole, they foresee an increase from approximately 18 million barrels a day this year to more than 37 million barrels daily in 1975. I might add that these views were supported by other economists at the recent World Petroleum Congress in New York.

These sizable increases in demand should be sufficient to absorb much of the excess capacity which exists today in Canada and elsewhere.

Finally, confidence of the petroleum industry in the future for Canadian oil can best be demonstrated, I believe, by calling your attention to the amount of exploratory effort going on right now in Canada. Exploration parties are ranging as far as the Northwest Territories and even beyond. Prospects for any oil development in the near future as a result of this search in the Far North are probably remote. But such exploration must begin now, years ahead of the actual need, if our increased oil requirements are to be met when they arise.

Canada's experience in oil development, while only loosely serving as a model for what Alaskans could expect, does amply demonstrate the conclusion that such development is costly and fraught with problems. The words "oil strike," at least for a decade and more, are not necessarily synonymous

with prosperity and unmixed blessings for everyone.

Nevertheless, I suspect that you Alaskans would like to fall heir to the kind of problems of oil plenty which are now plaguing your Canadian neighbors. I can assure you that the oil industry is doing its best to see that you get them.

In any appraisal of Alaska's economic future, oil must be considered as one of the important factors; and I would like to turn to that subject now.

As we all know, a sufficient volume of oil in Alaska would go a long way toward meeting the fiscal needs of the State and providing a sound economic base for long-term growth in most fields of activity.

Today, we are considerably closer to our goal of an oil-producing industry in Alaska than we have been at any time in history. On the asset side of the ledger we have the geologic signposts that point to a promising oil-producing province. There is also a debit side, with which all of us are uncomfortably familiar. Nature is jealous of its treasures and has resisted, by every trick of climate and terrain, most of our efforts to locate the oil we believe exists beneath Alaska's surface.

The risks likely to be encountered in Alaskan oil development are not for the faint-hearted, or for the speculator with a shallow purse. We recently witnessed the suspension of operations at Bear Creek, where one oil company reputedly sank $7 million into its well before calling it a day. This makes our $2 million worth of dry holes on Swanson River Unit and at Deep Creek look like bargains.

The magnitude of this gamble is well known to the oil industry. It is perhaps revealing that many of our country's biggest and wealthiest oil companies have no operations in Alaska at all, preferring to save their hunting money for what they consider more hospitable climes. The odds in this gamble, moreover, will grow longer if the industry moves into offshore drilling on Cook Inlet in the months to come. Once over water, the cost of putting down a well can multiply alarmingly, as we have already seen in the Gulf of Mexico, where the industry is still in the red.

All of these risk factors are methodically taken into account in the planning of exploratory operations in Alaska. They do not discourage us from seeking the possible rewards that would come from a substantial development of oil in this State. **Alaska, and the neighboring Canadian West which I have discussed, constitute the last frontiers for oil exploration in North America. The more we can find and develop oil resources in these areas, the more we can strengthen the productive capacity of our oil industries, our economies and the military might of our two free nations. That is why, despite the disappointments and the hardships, the risk is worthwhile.**

While I was preparing to make this talk, a few weeks ago, I spent an evening reading through some of Senator Ernest Gruening's writings on Alaska. You may remember in his book, "The State of Alaska," he breaks down the historical periods into what he terms the eras of "total" and "flagrant neglect"; of "mild but unenlightened interest," and ranging on through an era "of growing awareness" to the present.

The present, I might categorize, is the era of "great expectations." Within a relatively short span of time, Alaska has achieved the pinnacle of full and equal statehood, and has experienced its first commercial oil strike. Either development by itself would have been enough to embolden Alaskans about their future. Together, these events form a combination that must raise high the spirits of all but the most timid.

How well — and how soon — are Alaska's "great expectations" to be realized? Endless speculation has been devoted to that question, much of it linking the future of Alaska intimately with the future of its oil. So let me review here how far this oil development has come along so that we may try to estimate how far it has yet to go.

More than two years have now passed since the Richfield Oil Corporation's Swanson River Unit No. 1 ushered in this new era in Alaskan oil development. After that event, our company entered into a partnership with Richfield and two other companies in the Swanson River Unit, and development has proceeded with both good—and not-so-good—results.

Some Alaskans perhaps were disappointed that the discovery at Swanson River Unit did not immediately set off a widespread drilling program by ourselves and by other oil companies. We were asked why we did not at once bring in three, or four, or even more drilling rigs to drill up this new oil field as rapidly as possible.

We have had the practical answer to that question in the months since the discovery.

A total of five wells has now been drilled in the Unit. Two others are currently drilling. We have three producers and two dry holes. Additionally, another wildcatter drilled a dry hole very close to our holdings.

Each well that has been drilled—whether productive or dry—has enhanced our chances of choosing a productive site for the next development well. This step-by-step approach is minimizing failures, and thus avoiding wasteful development costs. Contrariwise, if we tried to drill these wells four or five at a time, the ratio of dry holes to producers at this stage of development would almost certainly be higher.

I don't believe I need belabor the point that neither the oil industry nor Alaska can afford an excessive number of dry holes. They are not only bad financially, they are bad psychologically. Do not for a moment under-estimate the discouraging effect upon oil investment of a series of unproductive wells. Men with money to spend on oil exploration are watching Alaska. Each time we succeed in bringing in a well, their interest in bringing this money to Alaska will pick up. Each time we fail, their interest will wane.

For all these reasons, our company, as operator of the Swanson River Unit, is proceeding with the development of the field at the pace which is most likely to return the maximum economic rewards to all concerned, meaning both the people of this State and the leaseholders.

We now have two sets of crews and drilling equipment working. As I have indicated, the outcome of the present drilling will determine the location and extent of drilling operations which immediately follow, and so on into the future.

Elsewhere, outside of the Swanson River Unit, four wildcat wells are being drilled. These are located variously on the Kenai Peninsula, on the West side of the Cook Inlet and on the Alaska Peninsula by Bristol Bay. The location for a fifth wildcat is being prepared in the Yakataga area.

Aside from actual drilling, the industry is engaged in a very broad program of surface studies to select other potential drilling sites. Our company,

(Continued on page 37)

FOR CASING STRING DESIGNS ...SEE THE MAN BEHIND THE ORANGE BANDS!

G. A. Armour
Youngstown, Ohio

Lloyd A. Brudvig
Tulsa, Oklahoma

John Casner
Supervisor of Tubular Service Engineering
Youngstown, Ohio

Guy W. Heinrich
Shreveport, Louisiana

Robert K. Little
Dallas, Texas

Donald R. Lungenecker
Casper, Wyoming

He's the Youngstown Field Engineer near you—a thoroughly trained, seasoned engineer—who brings to bear the *total* experience and technology of an oil country major. He's at your service, without cost or obligation.

Call him when you want complete performance data on Speedtite, Extreme Line and Buttress Thread, as well as API casing.

Call him when you need the string design that will do the job, and provide the required safety factor at minimum cost.

Call him when you want his professional judgment during drilling operations—on site—any hour of day or night.

Ask him to bring along design data that's rated tops by drilling engineers: Youngstown Booklet #60 . . . Youngstown Casing String Design Charts . . . and "Survey Report on Casing String Design Factors". You'll find it pays to know the "Man Behind the Orange Bands". The Youngstown Sheet and Tube Company, Youngstown 1, Ohio.

Charles E. Downey
Los Angeles, California

Henry P. Flynn
Midland, Texas

Walter G. Kingelin
Senior Field Engineer
Houston, Texas

John R. Parker
New Orleans, Louisiana

QUALITY
YOUNGSTOWN
SERVICE

Youngstown

SEAMLESS DRILL PIPE • CASING • TUBING

THE GRAPEVINE

By RICHARD SNEDDON

How It Began

Chatting with Earl Daniels, Mac McFaddin, and Don Hall the other lunchtime, the discussion finally drifted around to superstitions like being scared to walk under a ladder that is about to fall; being worried about a bank balance that has already fallen; having the jitters when someone puts an umbrella up in the house; or a black cat strolls across one's bow. These things are very important, you know, to some people, and with good reason or lack of reason. We once had a friend who ran so fast to get around a black cat that he had a seizure of some kind and passed out in a paroxysm of fear. You see what we mean! In Caledonia, it is considered bad luck to have one's bagpipes go soft while playing the third verse of "Loch Lomond," and a punctured haggis is also regarded as a portent of almost immediately impending disaster.

Drillers' Superstitions

All of which brings us around to Mac McFaddin's sworn statement that if you should visit a drilling contractor in his home and should even without malice put your hat on his bed, he will hate you and all your progeny unto the third and fourth generations, because he just knows that the gesture will bring him some fearsome ill luck. We found that the younger contractors like Art Heiser were unfamiliar with this strange belief but those of our own vintage, such as John Grant and Doc Hayes knew all about it. In fact Doc says that ball players indulge this same form of irrationality and a lot of others besides. When we first arrived in the United States just after the turn of the century, two dollar bills were supposed to be unlucky but we never heard of anybody giving one away for a dollar and a half.

Chickens for Sale

During this same session Earl Daniels told a story that gave us a real chuckle: If you ever lived in a farming community you will remember that it was not uncommon to pay off the charge account at the local store with a side of beef or a crate of eggs. Well, one farmer who was quite a poultry raiser brought in a barrel of chickens as part payment on a long standing account. They were all plucked and cleaned and ready for the spit but everyone in an agricultural area keeps a few chickens of his own and they didn't sell very fast. Finally, however, they were all gone but one and, this whole affair having taken place in the b. r. (before refrigeration) age, it had acquired that certain effluvium. He was making plans to bury the cadaver with due ceremony when a lady bounced in and inquired, "Have you any chickens?" "Oh my, yes," said the merchant, beaming, "I should say so!" Meantime he was rummaging about in the barrel and presently he came up with the last of the Mohicans. "How about this one?" he asked. "No," said the lady, slowly, "it doesn't look too good. Have you any others?" "Why, certainly," replied the eager proprietor, ducking back into the barrel, repeating the rummaging act, and coming up once more with the same rancid remains, "what do you think of this one?" "Yes, that's better," the lady answered with a smile, "I'll take two!"

Glenn Pitts and Ray Johnson meet in New Jersey.

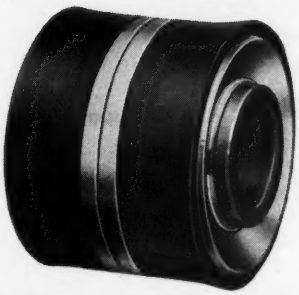
Hatheway to Iran

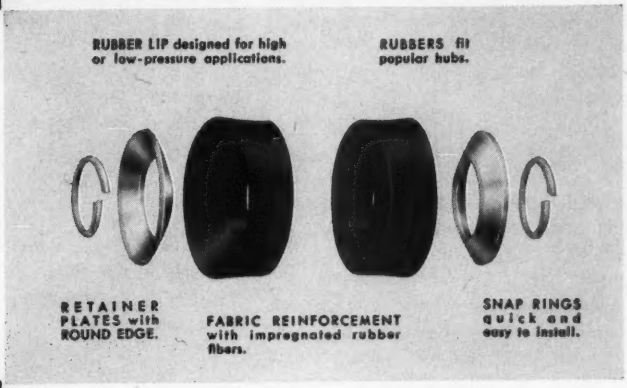
Had a few minutes with Joe Hatheway a short time ago just before he took off for Masjid-i-Sulaiman in Iran where he will be officiating for some time as assistant chief petroleum engineer for Iranian Oil Exploration and Producing Company. As we understand it, Joe is an employee of Richfield on loan to the overseas concern and Richfield, of course, is a member of the so-called Iricon group. Joe is a native born Angeleno who was graduated from Colorado School of Mines and promptly went down to Eastern Venezuela on a special assignment for Schlumberger. Then followed a year in the U. S. Air Force, specializing in meteorology, and before his discharge attaining the rank of captain. He then spent 18 months with General Petroleum Corporation as a trainee in geology and petroleum engineering and for the next four years thereafter was with Pacific Western Corporation for which he functioned as geological engineer. In 1951 he accepted a similar post with Ed W. Pauley which after 6 years he resigned to go into consulting work, and in this enterprise he was still engaged when he decided to take on the Iranian adventure.

Eagle Defined

Joe is a relaxed sort of chap with the typical tan of the out-doorsman. During his school years he was something of a track star and the only reason he wasn't on the Olympic track team was that nobody asked him. His current diversions are golf and fishing. He describes an eagle as a small boy who watches from the hillside while you drive a new ball into the woods. When you have played through he swoops down on it and then sells it back to you next Saturday. The whole family which includes his lovely lady, Joyce, and two boys, Michael and Joe Jr., took the jaunt to the Middle East and they did so with real zest. They are looking forward eagerly to the new

NEW.. FORMULA-59




RUBBER LIP designed for high or low-pressure applications.
RUBBERS fit popular hubs.
RETAINER PLATES with ROUND EDGE.
FABRIC REINFORCEMENT with impregnated rubber fibers.
SNAP RINGS quick and easy to install.

GUIBERSON SLUSH PUMP PISTON RUBBERS *NOW* MEET ALL DRILLING CONDITIONS

Now Guiberson has developed a new, tough, oil resistant piston rubber compound.. specially formulated to extend piston and liner life and cut costly rig downtime.

Meeting the need for higher volumes and greater pressures, this special rubber compound is exceptional in its resistance to tearing and for its long life in pumping abrasive drilling muds.

The rubber section of Guiberson piston rubbers is firmly bonded to a heavy fabric backing for supporting maximum fluid loads. A special retainer plate with a rounded edge prevents cutting the rubber.. cause of many premature failures.

Guiberson piston rubbers are proving themselves after a year of punishing tests in the laboratory and in slush pumps on the rig. These rubbers are delivering outstanding performance through long runs under rugged drilling conditions.

Try them and see..
Guiberson rubbers are top quality
.. so order them now..
start cutting expenses.

Sold by
OIL FIELD SUPPLY STORES EVERYWHERE

SAFE THAN SORRY BETTER BE GUIBERSON

THE

GUIBERSON

CORPORATION

ESTABLISHED 1919 — DALLAS, TEXAS U. S. A.

life and we feel sure that they will find the entire experience interesting and enjoyable. That's the least they deserve and that's exactly what we are wishing them.

Same Again

Tom Johnston's latest story is about his first trip to South America and his difficulties with the language. It was many years ago that he made his initial effort at foreign sales and we won't mention the site of the incident but in any case he was given a royal reception both by the expatriated yanks and the high echelon nationals. The day was spent in going around the fields and discussing the operational needs in a thoroughly business-like manner but when work was through in the late afternoon all the engineers, geologists, and the staff members gathered around for a *light* libation and a bull session. A small Spanish boy took the orders and everyone in the concourse wanted something different, but he handled his assignment without a blunder. After the first drink and they were all ready to try again, someone shouted to the boy, "el mismo!" which means, "same again" and back he came with a fresh order. This went on for some time with "el mismo" being called with unfailing frequency and when the session finally broke up nobody was feeling the slightest pain. Next morning Tom ran into Paul May, then with W. K. M., and also on his first visit below the border. He asked Paul solicitously how he fared at the cocktail session and with his hands clutching his temples Paul answered, "Well, that first Scotch and soda was fine but when they began serving these el mismos they sure ruined me."

Hold That Tiger!

Who should pop into Los Angeles recently but Ross Nichols, the once famed college and Olympic hurdler, and former manager of Bolsa Chica Oil Company, home on a furlough after 10 years in Sumatra as production manager for Cal Tex. He walked into town, with no suitcase yet, as nonchalantly as if he had just been on a trip to Watts. Ross is a charter member of the Petroleum Club of Los Angeles and is real nice people with an unusual facility in the speculative enterprises. He used to stay at the Petroleum Club so late in its old Biltmore days that he was several times dusted off by the char woman. He has become quite noted as a hunter of tigers over there in the Sumatran jungle. He tells about having made a mistake one day and gone out without a gun. He had just penetrated a few yards along the jungle path when he came face to face with a tiger. As the animal leaped at him, Ross instinctively ducked and about faced. Again it leaped and again he ducked under. When this had happened three or four times the tiger slunk off in obvious disgust. Ross tiptoed after him to see where he had gone and finally found him down in a hollow practicing shorter jumps.

Houstonians Welcomed

A recent visit from Dan and Cissy Gilliland, now residents in Houston Texas, where Dan is a considerable attache of the Republic Steel Corporation, was the occasion for an interesting get together at the home of brother Jack and his "guid wife," Janie in Beverly Hills. Dan came back looking as if the climate of Texas was just what he needed. He was a few pounds heavier, his gin rummy was much improved, and he looked sharper than a two-edged sword. Among those who traveled to the Gilliland manor to greet the neophytic Texans were the H. C. Smith Company Hal Bentsons; Bethlehem Supply Co. Jack Freemans; Republic Supply Co. Glenn Pitts, Bud Russells, and Chuck McIntyres; Monarch Engineering Bill Goertzes; Parkersburg Rig & Reel Colin Rooks; Pacific Wire Rope Dave Carnahans; and Wahlco Engineering Inc.'s Bob Wahlers. The male segment of this consortium exercised itself no end over the matter of fatigue in oil field tubular goods, sucker rod tensions, and wire rope elongations. However, from approximately 8:30 p.m. until 1 a.m., the ladies spun tall-type tales that made all that Paul Bunyan stuff look mighty puny. There has since been a pretty unanimous expression of opinion by those present that Dan and Cissy should be persuaded to come back to Los Angeles oftener so that these highly educational sessions might be continued.

The Hendricks Saga

Ran into that old Pomonan, Bill Hendricks, a while ago and discovered that he was superintendent of drilling and production for Graham & Loftus about the time we had charge of the gauging operations out there. This was just before we did our best selling record "You tak' th' high gauge an' I'll tak' the low gauge," after which we thought it prudent to disappear for a spell. Bill meantime migrated to Long Beach where he managed the Hollywood Oil Company's Harbor operations. Later he taught petroleum technology at Long Beach City College until he was commandeered by Ned Brown to look after purchasing personnel, and rig shipments to foreign fields, for example, New Zealand Turkey, France, Venezuela, and Guatemala. He was a California University major in engineering and geology and during his school years worked in the oil fields. Way back yonder he was with the Division of Oil & Gas at Taft when that great domino expert, Harry Godde was in charge. Later he functioned as an oilfield scout for General Petroleum Corporation, and also did a stint as petroleum engineer for Western Oil & Refining Company during the second Signal Hill boom. There isn't much that Bill hasn't done in the way of field work from ditch digging to taking complete charge, and he still has more zest and oomph than most men half his age.

Jack Pate Passes

It was sad to learn about the demise of Jack Pate, the old "cowpoke," from Union Oil Company, after a prolonged case of heart trouble. We had known Jack for a little over 30 years and always held him in the highest regard as did everyone who had the good fortune to become acquainted with him. As a matter of fact we had inwardly felt a little personal pride in Jack because we picked him out away back about 1927 or thereabouts and very specially recommended him to the then superintendent of the Los Angeles pipe lines, Bill Hay. Jack, as is now well known, himself became superintendent and in the process made more friends than a country doctor and in much the same way. He was a thoroughly sympathetic chap with a big heart and a terrific sense of humor. For many years his hobby had been raising cattle, hence the name "cowpoke"; and some of his adventures with Phil Rockfellow, Howard Robinson, and a number of other amateur cattlemen were classics. We remember one time Jack was transferring five or six calves from one place to another by truck in the dead of night. Somehow he had neglected to fasten the tailgate properly and when he arrived at his destination he had no calves. It took him all night and most of the next day to reassemble his juvenile herd. It was particularly hard

It takes only one line
to pump all medium to deep wells

CONTINENTAL-EMSCO D+B CHALLENGER PUMPS

Various metals, pump types and pump combinations give *extra flexibility* to D+B Challenger pumps. Interchangeability of their API parts cuts inventory costs. Types are available for all well conditions . . crooked or slant holes . . medium deep to wells over 7,000'. Challenger pumps can be assembled to pump stripper wells, sandy or gaseous fluids. Many corrosive resisting plunger-barrel tube combinations and special cages, fittings and balls and seats can be selected to handle sweet, sour or oxygen corrosion. Special pump combinations to provide extra volume, pump extremely gaseous fluids and meet other well peculiarities can be assembled from standard Challenger pump parts with the use of only a few special parts.

Special Features

VALVE ROD COUPLING AND WING LOCK NUT allow precise spacing of traveling and standing valve for maximum pump efficiency.

PLUNGERS are made of various corrosion resisting metals. They are interchangeable between all types of Challenger pumps and may be switched *end for end* within pumps for longer wear. Plunger sections may be replaced economically after long and hard usage.

ARMORED CAGES are precision machined and given special heat treatments. Ball guides are treated to an extreme hardness to resist wear and assure long life. Outside diameter of body of the cage is given another special heat treatment to insure toughness and durability. C-E's Armored Cages are standard in the make-up of the Challenger pump.

Put D+B Challenger pumps
to work in your wells.

Ⓐ UPPER LOCK NUT*.. prevents breakage of valve rod and eliminates unscrewing.

Ⓑ LOWER LOCK NUT*.. prevents valve rod breakage and eliminates valve rod "backing out" of plunger cage.

* Upper and Lower Lock Nuts are C-E Exclusives

Green Panel RWB.. Black Panel RWA

RWT Type is Also Available in D+B Challenger Line.

For Service that Sings..Equipment that Hums..Go..

CONTINENTAL-EMSCO

Serving the Oil and Gas Industries ... Worldwide

P 906

CONTINENTAL-EMSCO COMPANY • A Division of The Youngstown Sheet and Tube Company • General Offices: Dallas, Texas
Export Division: 30 Rockefeller Plaza, New York, N. Y. • Continental-Emsco Company Limited • General Offices: Calgary, Alberta, Canada
Continental-Emsco Company C. A., Caracas, Venezuela • Plants: Houston and Garland, Texas; St. Albans, Herts., England • *Representatives in All Principal Oil Fields of the World*

B and W Inc.
SCRATCHERS AND CENTRALIZERS
for a good cement job

Pioneers in the Field

Good Field Service. **Trained and experienced B and W field servicemen — working in close cooperation with your engineering and field crews — will assist in developing and carrying out a well planned program *For a Good Cement Job.***

B and W Inc.
Well Completion Specialists

GULF COAST
Box 5266
Houston 12, Texas
Phone WA 3-6603

WEST COAST
19706 S. Normandie Ave.
Torrance, California
Phone FAculty 1-2463

101

since the news had leaked out and friends by the dozen kept calling in to offer ridiculous forms of help. Jack was one of the founders and a past president of the Western Pipe Liners' Club and its members to a man think as we do that Jack Pate was one of the finest men that ever lived.

The Bailey Travelogue

We have a card from Al Bailey, the noted Axelsonian, datelined Buffalo, New York, and as nearly as we can figure out, he went back there in the hope of taking a trip along the newly completed St. Lawrence Seaway. However, he found upon arrival in the deep east that there were no scheduled sailings until the fall. He changed his mind then and settled for a trip to Chicago and Cleveland. Don't know whether or not he took one of the lake boats to do this but we took that trip several years ago and thoroughly enjoyed it. Al is a Life Member of the P. P. P. and is resident in Taft where he looks after the sick and bereaved people of the oil industry tenderly and affectionately and is hence himself very highly regarded by the local populace. He is just one of those rare beings who takes a delight in being helpful wherever he can. His snow white hair and burnished bronze complexion are landmarks at the P. P. P. barbecues which he seldom misses and his excellent sense of humor makes him interesting and entertaining company anytime anywhere.

Why Gild the Lily?

From our old fraternity brother, Waldo Moore, the Cavins higher-up, we received a short time ago a prospectus for a course entitled, "Foundations of Future Electronics." Waldo asks if we would in a few simple words break the thing down for him. Now, this ain't easy because as the author says, "The demands facing the present day engineer through the problems posed by the space age are such that he will require a comprehensive orientation in diverse fields heretofore considered the domain of the pure scientist." As a matter of fact it takes about a page in each instance to list the academic qualifications of the twenty or more instructors involved. Most of them have as many degrees as a Fahrenheit thermometer, and they are the greatest bunch of doodlers you ever saw. The book is full of childish drawings but as far as we are concerned the language will have to stay the way it is. We know no four letter words for such statements as "The entry of ferromagnetism into modern electronics. Non reciprocal effects, and no linear effects. Antiferromagnetism and antiferromagnetic resonance." You see what we mean, the thing is already so simple there is no sense in trying to simplify it.

Nothing New

Shooting the breeze with Verne King the other day we remarked that there was nothing new under the sun and straightway we barged off into all sorts of strange conjecture. We had thought, for example, that skin diving was a modern innovation, but Pliny, more fully called Caius Plinius Secundus, an old Roman writer who flourished from 23-79 A.D., tells of divers engaged in the strategy of warfare, working underwater and carrying tubes in their mouths to "draw air down into their lungs." We thought the Germans were first to dream up the horror of bombing from the air, but the story of Aeschyllus, a Greek dramatist who lived 500 years before Christ, nullifies that. Told by a soothsayer that he would be killed by a blow from the sky, he reasoned that he might be laid low by a tile falling from the roof of a building. To avoid any such contingency he moved out into open country. But it availed him nothing. An itinerant eagle flying home with a tortoise in its beak had to sneeze or yawn or something. It dropped the tortoise on the head of Aeschyllus and killed him deader than the meat in a deep freeze. We thought the king size bed was a Hollywood invention, but no, sir. According to the Bible, Og the king of Bashan had a bedstead of iron and 9 cubits was the length thereof and 4 cubits was the breadth. Now a cubit is the distance from your elbow to the tip of your outstretched middle finger so you can figure it out for yourself.

The Divining Rod

We have remarked on several occasions that technical accomplishment is a progressive sort of thing that begins with unmethodical fumbling, gradually becomes invested with more and more sanity, and eventually blossoms into what intellectuals call an exact science. However, coincidental with any species of evolution is the expansion of knowledge concerning it, and the greater the accumulation of relevant data, the more certain we grow that there is no such thing as absolute exactitude. Thus, the early diviner with his forked witch hazel twig made a contribution to the

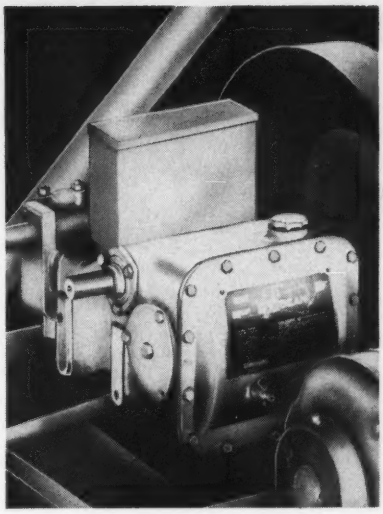
science of oil finding that, in the light of his limited understanding of the factors involved, was a highly important one. It was, indeed, the first expression of a belief that the finding of oil need not be altogether haphazard. The first effort has to be made before the rest can follow, so maybe the first diviner did more for the science of oil exploration than did some of the subsequent contributors. All of which is preliminary to the disclosure that we have had occasional letters and one visit from a former Cal Tech instructor, Clarence V. Elliott, a thoroughly rationalistic gentleman who is still experimenting with a modernized version of the divining rod. Incidentally, Mr. Elliott is one of the few people we know who has a kind word to say for smog. In effect, he contends that with traffic the way it is, we are lucky to have smog to keep the low sun out of the auto drivers' eyes. Otherwise the evening air would be more polluted than it is with the sickening sound of crunching fenders and the screaming of outraged victims.

The Donkey Serenade

A great to-do is taking place at the east end of Huntington Drive where the Kelley's donkey is amusing most of the community children no end but is apparently bringing deep distress to one sensitive soul. In any case this indignant citizen writes a letter to Jim Kelley that the FBI would probably construe as a threat. It reads as follows: "Kelley: Your donkey is very disturbing in the neighborhood. Along with the unsanitary conditions it brings it wakes us in the morning and also all night. Please do something about it." It might be explained that the donkey was acquired by the Kelley family while it was still young and in the meantime has suffered a strange metamorphosis. When originally adopted the animal readily answered to the name of Betty, but its voice slowly changed from a pronounced soprano to a deep *basso profundo,* and now just as readily answers to the name of Sam. As far as the anonymous complainant is concerned we can only say that being wakened "in the morning and also all night" is an utter impossibility but nonetheless we understand that out of the goodness of his unsanitary old heart Sam has extended his complete forgiveness to the unknown writer.

Here and There

By the way of last minute roundup, we hear that Bill Heater, the noted cultivator of Macadamian nuts, is on his way to Europe to consult with Chancellor Adenour on whether the seeds should be planted perpendicularly or horizontally. The National Association of Corrosion Engineers will hold an important two-day session in Bakersfield on September 29 and 30. If your coffee has a rusty taste, here is your chance to find out what has gone wrong. You might be suffering from electrolysis or perhaps your planter is mixing in iron oxide just to increase the weight. Herb Maland, vice president of R. J. Eiche & Associates in charge of New York operations jetted out here recently, spent a couple of weeks with Bob Eiche visiting the California manufacturers that the firm represents exportwise, and then jetted right back again. On the subject of flying, heard one fellow say recently that we would soon be able to just rise up in the air and wait for our destination to stop underneath. He also suggested that even at presently available speeds, it is possible to have breakfast in London, then fly to Melbourne, Australia, and have dinner the night before. Haven't heard a word from Phil Hauck, the Texaco purchasing agent since he retired to a life of ease and indolence, leaving nothing behind him but a card that read "no office, no business, no money, no phone." They'll be back long before this appears in print, but we had a card from Frank and Pearl Leonis, datelined Honolulu where they seemed to be having a wonderful time. Occidental Petroleum Corporation seems to be doing all right since its merger with the Gene Reid enterprises. Gene is a fine person with a good analytical mind, and as a board member and executive president he will be a real asset to the Corporation. Doug Graham dropped in at Rangoon, Burma, a while ago for a powwow with Neil Willis. Thence he left for Africa on a big game hunt to Northern Rhodesia, a trip he has been planning for 2 years. Noticed the other day that Trader Horn had died and was afraid for a minute that it was Trader Snedderhorn. We hear tell that Roy Johnson will be here soon and in consequence of the rumor local housewives are locking up their pianos. Tony Alcorn, the high echelon Shell pipe liner met with the local Purdue alumni at the Petroleum Club a while ago to make arrangements for the forthcoming visit of the Boilermakers to the



JOHN BEAN TRIPLEX PUMP MAINTENANCE: 30 MIN. PER YEAR!

MORRIS, OKLA. — The photo above shows a John Bean Model 410 Triplex Pump installation for a leading national oil company in Eastern Oklahoma. Its maintenance record is dramatic proof of unusual reliability and performance — 30 minutes, once-a-year to replace piston cups! Yet, the pump has been in constant 24-hour operation for over two years.

Used to backflush a water treating filter in a water flood plant, the pump handles 340 barrels of salt water per day at 90° temperatures. Rated performance of the John Bean Model 410 is 10 GPM displacement of 600 PSI.

Pumping Problem?

Send us details on your pumping problem. We will send you complete recommendations.

NEW and BIGGER models

75th ANNIVERSARY

fmc FOOD MACHINERY AND CHEMICAL CORPORATION

Putting Ideas to Work

John Bean ®Division

Industrial Pumps

San Jose 1, Calif. • Lansing 4, Michigan

Department CO-6

UCLA campus. The boys were delegated to find the book match covers with PC on them. They thought it meant Purdue Club.

More of the Same

Besides Jack Pate, three other well known Union Oilers have passed on in the last little while: Jack Maddux, former drilling superintendent at Dominguez; Chap Perry, foreman of field operations at Santa Fe Springs; and John Church, for many years head of the land and leasing department. Recent guests of the Ed Bedfords were the Charles McDonalds of Boston where the naked truth is the undraped actuality and ducks have broad williams. Helen (Mrs. Ed) Bedford's father, Will Learmont, now creeping up on 95 years of age, had a letter of introduction to Charles McDonald's grandfather when he first arrived here from Scotland and, of course, the families have been great friends ever since. Just as we go to press we hear that Slim Fowler has sold out his drilling contract business to Carl Gates. And we have just had a card from Claude Reynolds, retired Standard Oiler who is back foraging around the Drake well at Titusville, Pennsylvania. All he could find were a few more Standard Oilers also foraging around the Drake well.

Westates-Continental In Wyoming Deal

H. W. Thompson, president of Westates Petroleum Company, and J. W. Liddell, vice president and Rocky Mountain Regional Manager of Continental Oil Co., announced jointly the sale by the Hamilton Dome Oil Company, Ltd., a wholly owned subsidiary of Westates, of one-half interest in its Hamilton Dome properties to the Continental Oil Co.

These properties include 25 wells presently producing 1,250 barrels of oil per day in the Hamilton Dome Oil Field, Hot Springs County, Wyoming, which is located 20 miles northwest of Thermopolis, Wyo.

Hamilton Dome Oil Company has been appointed as operator of the properties and announced that drilling operations have already started on 13 additional wells to be drilled during the next 18 months. Remedial operations will be undertaken at once on some of the existing wells. Increased production is expected from this development.

ALDEN ORCHIDS HONORED AT U.S. FAIR IN MOSCOW — Thousands of beautiful, dainty orchids, grown in Hawaii by Alden Associates, were flown via SCANDINAVIAN AIRLINES SYSTEM to open the American Exhibition recently staged in Moscow before record-breaking crowds. Sanctioned as official U.S. goodwill ambassadors to the Russian people attending the spectacular American Exhibition Preview, the exotic island blossoms were donated for the important International event by Alfred T. Alden on behalf of the firm which bears his name. This S.A.S. flight marked the first time in history that Hawaiian flowers have ever been seen behind the Iron Curtain, according to Mr. Alden.

Kerr-McGee Withdraws Proration Application In Oklahoma

Kerr-McGee Oil Industries, Inc., of Oklahoma City, has withdrawn its application, filed with the Corporation Commission, to continue proration of crude oil purchases for the months of September and October. The proration of 65 per cent of April runs, as authorized by the Corporation Commission for the months of July and August, was discontinued September 1. After that date Kerr-McGee will purchase, from all producers from whom the company buys crude oil, all of the oil that can be run in accordance with state production allowables.

A Kerr-McGee spokesman explained that the lifting of proration results from recent improvement in the demand for Oklahoma crude oil.

Kerr-McGee is the second largest purchaser of crude oil in the state of Oklahoma, normally gathering in excess of 55,000 barrels of crude oil per day.

Dresser to Move Turbodrill Plant

The Turbodrill Division of Dresser Industries, Inc., is to be moved from its present location on the grounds of The Guiberson Corporation, one of the Dresser Industries, according to a statement by J. B. O'Connor, Dresser president.

O'Connor said, "For nearly three years the Turbodrill Division has been engaged in intensive work aimed at improving the turbine mechanism of the turbodrill. Most of this work has been done at the plant of The Guiberson Corporation, which has large facilities for rubber molding. As is generally known, some of the essential parts of the turbodrill are of rubber construction.

"Now, however, we feel that the turbine has been improved and perfected to the point that it leaves little to be desired. Our principal difficulty now lies in developing a bit which can withstand the great speeds attained by the turbodrill. We are in the midst of an intense research and development program designed to bring drilling bits up to the standard required by the turbodrill.

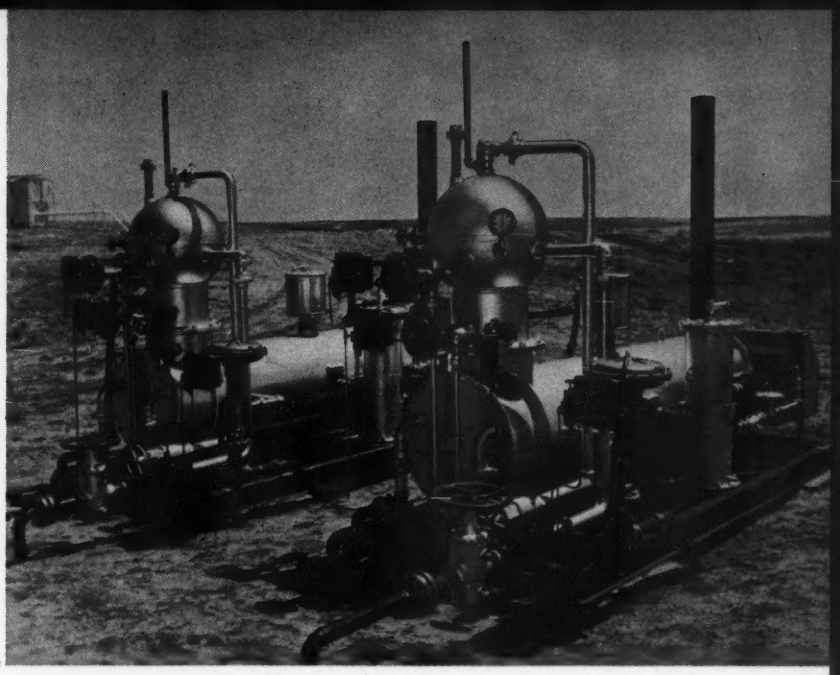
"To this end, we are moving personnel and facilities of the Turbodrill Division to the Dallas plant of the Security Engineering Division. There, the turbodrill engineers will have the advantage of large metallurgical laboratories, heat treating facilities, and extensive testing devices that should aid considerably in the creation of a satisfactory turbo-bit."

During the time that the Turbodrill Division was located in South Dallas, many improvements were made in the turbine mechanism of the drill.

Dresser officials have expressed themselves as more than satisfied that, at the present state of its development, the turbodrill represents an extremely effective downhole machine. The principal obstacle which prevents the turbodrill from being commercially feasible for ordinary drilling is the inability of present day rock bits to withstand the friction generated by the turbine, which rotates the bit at speeds up to 900 rpm.

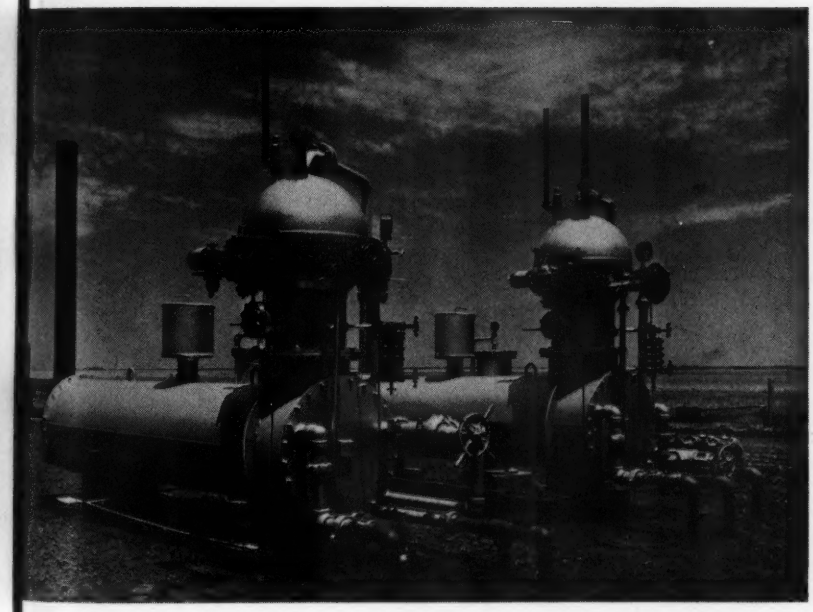
The demands made by the turbodrill on the drilling bits are so great that Dresser officials now anticipate the possibility of designing a bit which departs radically from the conventional type of drilling tool previously used.

These two BS&B FREE-O-FREEZ Units are typical of many going into cold weather areas.



The Economy Package...

For Freedom From Freeze-Ups!



FREE-O-FREEZ by BS&B is a packaged Heater-Separator requiring minimum hookup and specifically designed for cold weather operation . . . gives dependable, trouble-free service . . . even in the dead of winter!

FREE-O-FREEZ is a neat, compact, integrated unit . . . combines the field-proved advantages of spherical separation and indirect heating to provide efficient water-oil separation and release of solution gas.

Prior to choking, the wellstream is heated in the heater flow coil to prevent freeze-up and hydrate formation. The water-oil separator section of the spherical separator is immersed in the water bath of the heater where it absorbs heat to prevent freeze-up. Flash arrestors are provided for safety.

FREE-O-FREEZ is available in a wide range of heater sizes, coil ratings and spherical separator sizes . . . and with a large selection of heater and separator accessories . . . to satisfy a variety of lease conditions. Simple, rugged and accurate controls are used.

A call to your BS&B Man will bring you detailed information on the unit best suited to your requirements. Or, you may write to . . .

BS&B

ANOTHER EXAMPLE OF PRODUCT LEADERSHIP

BLACK, SIVALLS & BRYSON, INC.

DEPT. 1-BK9 P. O. BOX 1714, OKLAHOMA CITY

Republic Supply Announces College Scholarship Awards

The winners of four one-year college scholarships awarded annually by The Republic Supply Company of California have been announced by John J. Pike, president.

One recipient was Barry Banks, the son of M. L. Banks, branch manager of Republic Supply's Santa Fe Springs facility. A graduate of Whittier High School, Barry plans to attend California State Polytechnic where he will study industrial engineering.

Betsy Hess, the daughter of R. E. Hess, a member of the firm's San Leandro sales force, was another winner. A graduate of Castlemont High School, Betsy intends to become a teacher and will enroll at San Jose State College.

A third award went to Carole Horstmann, daughter of Chet Horstmann, a member of Republic Supply's Industrial Sales Department at Los Angeles. Carole was graduated from California High School of Whittier, and will attend the University of Southern California, with teaching as a goal.

Thomas Sanders, son of H. W. Sanders of the Los Angeles Purchasing Department, was the fourth award-winner. A graduate of Millikan High School, Long Beach, Tom intends to spend his freshman year at Long Beach City College, and then transfer to the University of California at Berkeley, where he will major in business administration.

Sponsored for sons and daughters of Republic Supply personnel, the annual scholarships were established in honor of the late W. Dale Russell, a long-time employee. Recipients are selected on the basis of scholarship, extra-curricular activities, and personality.

Dresser Reports Third Quarter

Dresser Industries, Inc., leading manufacturer of petroleum, gas, and chemical equipment, recently released its letter to shareholders with the news that company earnings declined during the third fiscal quarter, ending July 31st.

The cause of the diminished earnings was attributed to two prolonged strikes at plants of Dresser subsidiaries. The strikes caused the shutdown of activities at Clark Bros. Co., in Olean, New York, a manufacturer of compressors, engines and turbines, and the Security Engineering Division, Dallas, producer of rock bits and drilling tools for the petroleum industry. Both strikes have now been settled on a satisfactory basis, but, according to the letter, caused "a regrettable loss in earnings both to the company and to employees." Specifically, sales for the third quarter were $52,812,000 by comparison with $59,955,000 for the second quarter of the year, and $55,479,000 for the third quarter a year ago. Net earnings were $1,947,000 by comparison with $2,951,000 for the second quarter and $2,447,000 for the third quarter of 1958. The letter pointed out that the greater decline in earnings was due to the fact that operating expenses at the strike-bound plants continued, even though production had been halted.

On a per common share basis, earnings for the third quarter of 1959 were 41c by comparison with 63c for the second quarter and 53c for the third quarter of 1958. For the first nine months of 1959, net sales were $163,544,000 and net earnings were $6,691,000 or $1.42 per share. For the comparable 1958 period, net sales were $169,844,000 and net earnings amounted to $7,416,000 or $1.61 per share.

A microwave reflector being installed on Taylor Mountain near Ventura, Calif. by Shell Oil Company.

Shell Expands Own Communications System

Taylor Mountain near Ventura has a "new look" these days.

The facelifting occurred when Shell Oil Company recently installed a microwave reflector (officially called a "passive repeater") on the mountain top as a part of the company's private communications system.

From below, the passive repeater looks like a small metal billboard.

Actually, it's a 24 by 30 foot aluminum paneled reflector.

The reflector "bounces" microwaves (transmitted from an antenna on Oat Mountain near Chatsworth, 41 miles to the east) into Shell's Ventura office, where an antenna, receiving equipment and transmitter were recently installed.

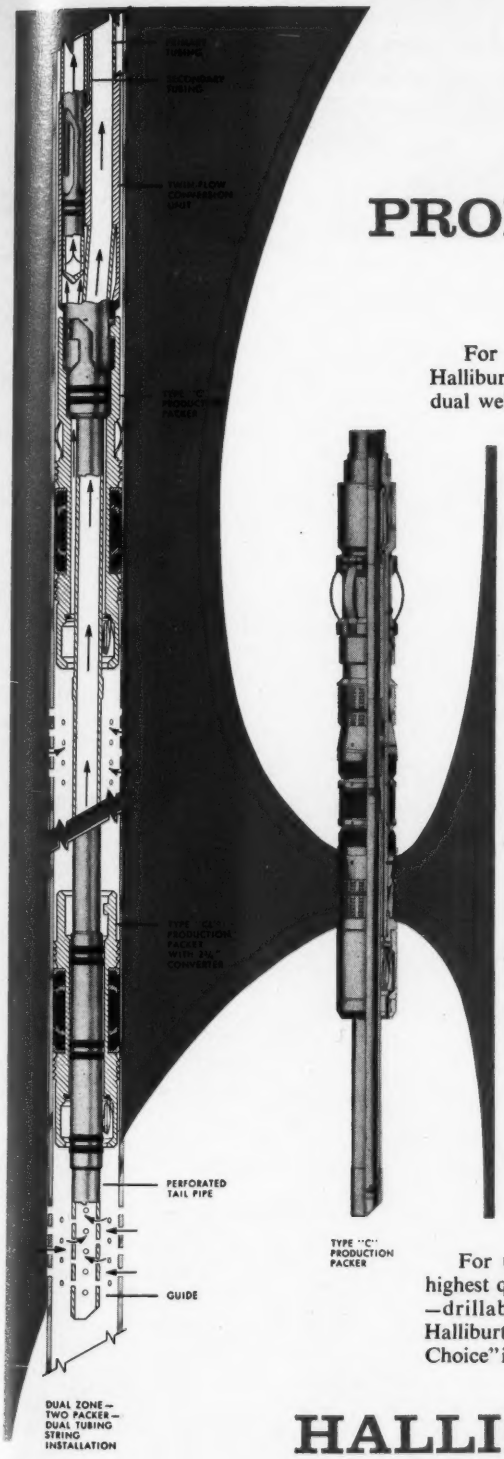
The new installations make Shell's Ventura office a "branch" of the company's main line microwave system which extends from Los Angeles to Bakersfield.

The Taylor Mountain reflector is "in line" with the Oat Mountain installation; from Taylor Mountain the microwaves are "bounced" two miles to the Ventura office.

The site for the new installation was selected by surveyors. They used transits to observe night-time signals (a blinking light) from Oat Mountain, 41 miles away.

From this, they came up with the proper location and "angle" for the new reflector.

The Transportation and Supply Department of Shell Oil Company and the Communications Department of Shell Pipe Line directed installation of the new equipment.



Where production performance counts...

Get the HALLIBURTON PRODUCTION PACKER best suited for the job!

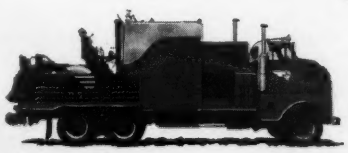
For ease of operation and dependable drillability you can select Halliburton Type "C" and "CL" Production Packers for single and dual well completion.

***Match the advantages** of Type "C" and "CL" Production Packers to the individual requirements of your well:*

- Drillable material withstands up to 10,000 psi differential pressure—highly resistant to corrosion and harmful fluids.
- The sealing unit and tubing are loose from packer before well treatment begins or well is placed on production.
- Packers permit use of standard tubing as tail pipe.
- Full opening—packer also adaptable for fracturing work.
- Back pressure valve helps to eliminate loading producing formation with mud or water when removing tubing from well or out of packer.
- Packer is suitable for gas or water injection wells—readily adaptable to permanent type completions.
- Retrievable sealing plug dropped on top of packer permits testing—treating and squeezing upper zone... easily retrieved with tubing.
- Expendable sealing plug run on the packer protects lower zone from pressure and fluid when treating above—can be expended by small amount of tubing weight as sealing mandrel enters packer.
- Sealing unit and extra seal elements help provide a tight fluid or gas seal in packer.
- J-Latch Sealing Unit may be used to anchor tubing to packer and place tubing in tension.
- Type "C" Production Packer is run on tubing or drill pipe.
- Type "CL" Production Packer is designed for electrical wire line setting on Halliburton Powder Type Setting Tool.

For unequalled field performance in production packers—only the highest quality can give dependable service. For economy—dependability—drillability—easier operation... plus savings in time and money—Halliburton Type "C" and "CL" Production Packers are still "First Choice" in the field. Write for a copy of the new brochure number S-8027.

HALLIBURTON Cementing Services

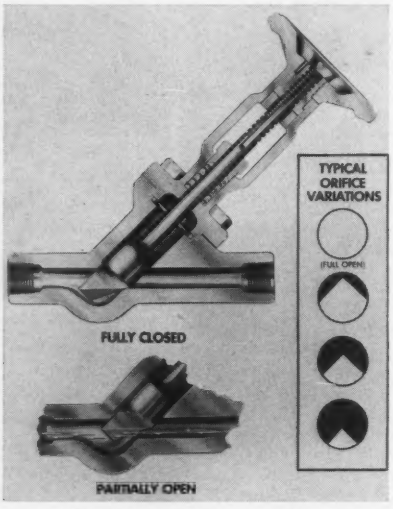


284 Service Centers—Just Minutes Away From Your Well

HALLIBURTON OIL WELL CEMENTING COMPANY • DUNCAN, OKLAHOMA

Straight-Flow Control Valve Has Low Friction Loss

The General-American Valve Company announces the Straight-Flow Control Valve, a revolutionary new control valve in which the flow moves in a direct and unrestricted straight line through the valve at all throttling positions. This greatly reduces pressure



Straight-Flow Control Valve

drop and friction loss while giving infinitely variable throttling.

The K Factor of the Straight-Flow Control Valve is only .35, 1/30th that of most globe valves.

Principle advantage of the Straight-Flow Control Valve is its ability to pass more fluid or gas for a given pressure and with less turbulence. This characteristic of the valve allows a greater capacity to be obtained from an installation without changing the dimensions of the piping or increasing the pressure. The installation of Straight-Flow Control Valves has increased the capacity of some flow systems as much as 20% overall.

A further advantage is to be found in its resistance to clogging. Since all of the flow is concentrated in a triangle-shaped orifice instead of in an annular ring as is the case with most throttling valves, it allows the passage of much larger particles of solid material at any given orifice.

In addition, the stem is fully stabilized at all throttling positions, eliminating tip vibration completely.

The unique method of flow regulation is accomplished by raising or lowering the stem which is placed at a selected angle to the flow. The stem has a 90° milled groove in the tip, the apex of which is parallel to the direction of the flow. (As shown in the cut, they are both at a 45° angle.) The stem does not rotate, but moves up or down in an angle. As the stem rises, a larger section of the V-groove is presented as flow area. The flow passes through the groove parallel to the apex. In this manner the flow does not deviate from a straight line at any point in its path, causing almost zero fluid friction and zero turbulence. (Patents are pending.)

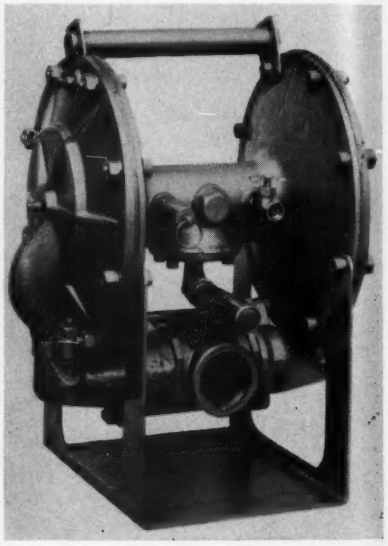
TXT Utility Pump Operated By Air or Gas Pressure

The compact, lightweight Series 9000 Utility Pump operates on 5 or more lbs. of air or gas pressure, develops a discharge pressure of 60 psi and has a maximum volume of 70 bph. It will pump slurries and heavy abrasive fluids such as encountered in sumps and ditches without difficulty, and is also used for recycling, transferring and many other services.

The Series 9000 is a double acting diaphragm pump. Powering pressure enters through a single chamber connecting the two diaphragms. A reversing valve switches pressure from one diaphragm to the other, providing continuous suction and discharge without lost strokes or lost motion. As one diaphragm is discharging, the other is on the suction stroke loading the chamber for discharge.

The input to output ratio of the Series 9000 Utility Pump is approximately 1 to 1. The pump requires no packing and needs no priming, regardless of the time it has been idle. Diaphragms are available in plastic, Hycar, Neoprene or other materials suitable for the commodity being pumped. The pump is approximately 16″ by 13″ by 13″ and weighs only 61 lbs.

Additional information and detailed specifications are available from the manufacturer, Texsteam Corporation, 320 Hughes St., P. O. Box 9127, Houston 11, Texas.



Series 9000 TXT Utility Pump

New Hughes Bit

The Hughes Tool Company announces the successful development of the first practical and effective bearing seal for a rock bit that seals in a bearing lubricant and seals out drilling and formation fluids.

A target date of January 1 has been set to have the first production sealed-bearing bits available for distribution in the type RG-1J, 8¾″ size. With regard to the other sizes in the insert series, and as to other types and sizes, distribution will be at the earliest date they can be produced, consistent with the Hughes policy of thoroughly testing each design before it is released to the field.

Baking "cookies" for better roads

"Cookies" of asphalt paving are baked and frozen in our laboratories, so we can measure how highways wear in all types of weather.

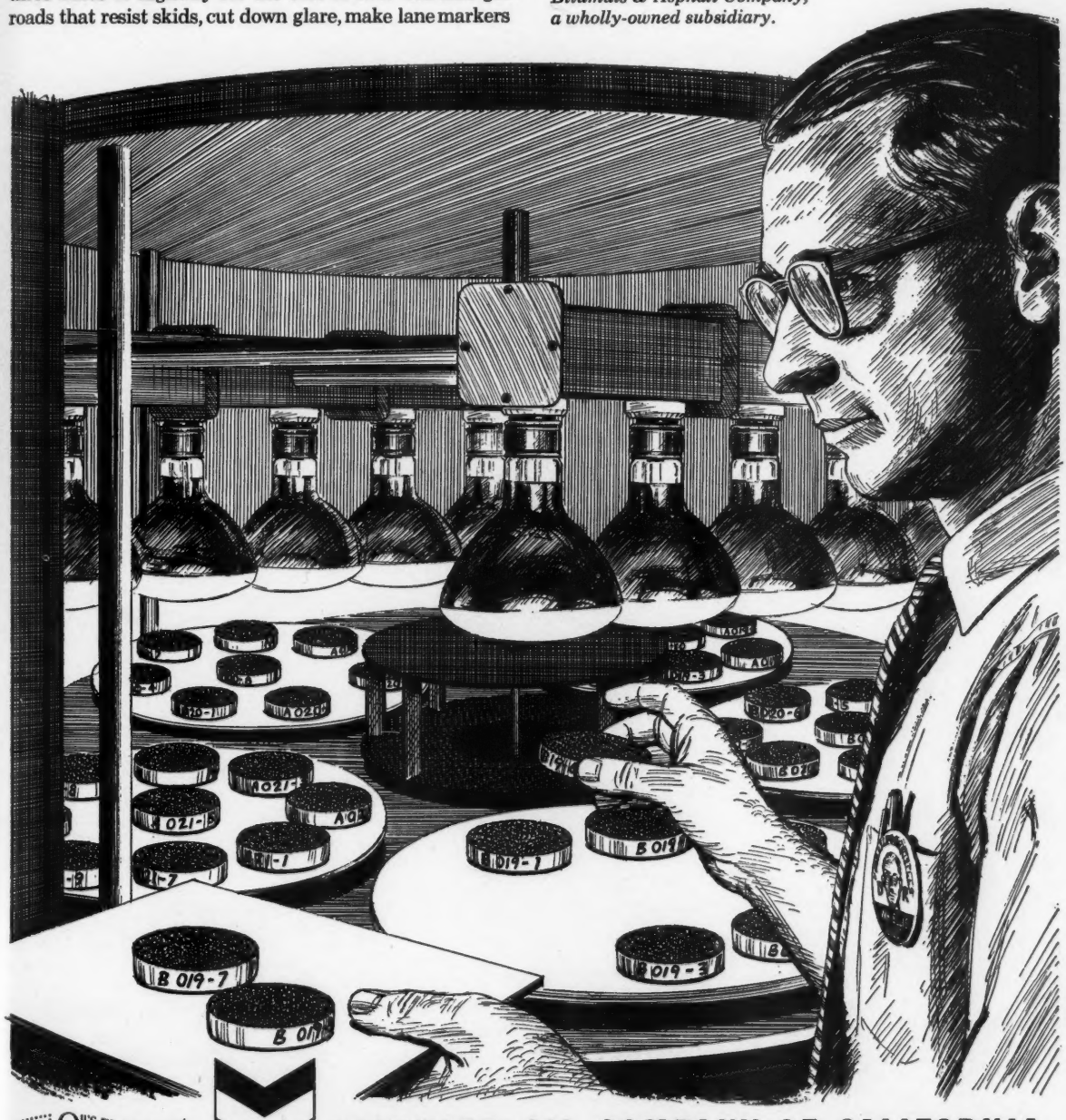
The man is William H. Ellis, one of Standard's scientists who conduct many such tests to improve highway materials and construction methods. We actually build roads, subject them to crushing pressure, try out many paving mixes, work closely with highway engineers.

Our work benefits you both as a motorist and a taxpayer. Asphalt costs less than any other pavement . . . three miles of highway for the cost of two. You also get roads that resist skids, cut down glare, make lane markers easier to see . . . roads which are smooth, quiet and comfortable.

Asphalt highways are ready for use within hours after laying . . . cost less to maintain and can be even stronger and better after years of service.

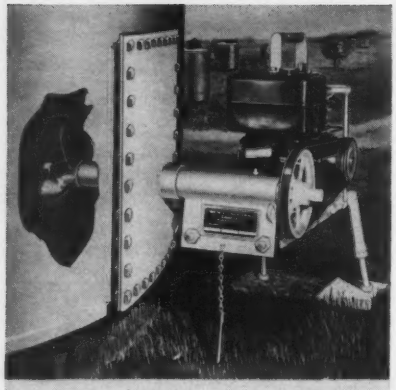
By such continuing research that brings you better products at lower cost, ***the people at Standard are planning ahead to serve you better.***

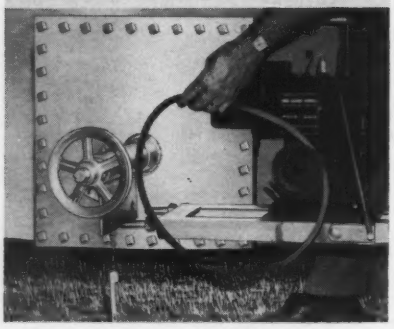
Standard's asphalt products are made and sold by American Bitumuls & Asphalt Company, a wholly-owned subsidiary.



OIL'S FIRST CENTURY
BORN IN FREEDOM
WORKING FOR PROGRESS

STANDARD OIL COMPANY OF CALIFORNIA





Views of the new Wichita-Smith Oil Agitator.

New Portable Oil Agitator Provides Economical Way To Blend Chemicals

A new concept in agitating oil in storage tanks to blend chemicals has been introduced by the Wichita Engineering Company, Wichita Falls, Texas. The Wichita-Smith Oil Agitator mixes crude oil and chemicals in a few minutes, and settles water in tanks, thus making pipeline oil out of tanks bottoms and reducing treating costs.

Action is thorough and fast. In many cases this eliminates expensive heaters and treaters. One agitator power unit serves any number of tanks. The operation is simple: The agitator with 8 inch three blade bronze propellor, encased in bronze bearing in shaft, is mounted in the lower half of the regular manhole plate and becomes a permanent attachment. The outside pulley extends 9" from manhole plate and is in bronze bearing. Interlocking device on housing, locks pulley wheel and can be quickly sealed by line gauger. The lower illustration shows how the Portable Wichita-Smith Power Unit is easily attached to the installed agitator unit. Legs are easily adjustable for proper belt tension.

For further details write Wichita Engineering, 3345 Arthur St., P.O. Box 990, Wichita Falls, Texas.

Richfield Applies for Rehearing to State Public Utilities Commission

Richfield Oil Corporation has applied to the State Public Utilities Commission for a rehearing on the Commission's August 4th decision which declared that Richfield is a public utility.

Declaring that, in selling gas to public utility gas companies and in building a pipeline across "public lands," it had done only what many other oil producers have done for many years, Richfield argued that such acts did not make it a public utility.

It argued further that if the Commission takes jurisdication over Richfield because of these acts, then it must also regulate as public utility gas companies all other producers of oil and gas who sell gas to the gas distributing companies and it must regulate as public utility common carriers all others, including gas companies, who have pipelines crossing public lands. Failure to do so would be "intentional, discriminatory enforcement of a statute."

Turning to section 216 (c) of the California Public Utilities Code cited by the Commission in its decision, the Richfield application stated that, "During the course of the last forty-six years, both the courts of California and the Commission have declared that 216 (c) cannot be interpreted literally.

"The oil and gas industry in California has relied upon these decisions in the expenditure of large sums of money for exploration and development of oil and gas reserves. The industry has sold its gas to public utilities without fear of regulation by the Commission.

"This new and novel interpretation of the statute will cause hardship not only to the oil and gas industry, but also to the public utilities and the public. It should be remembered that not only gas, but coal, wood and oil are used to create electrical energy. If 216 (c) is to be literally interpreted and applied, the Commission must regulate many others besides producers of natural gas. It must regulate everyone who delivers a commodity which is thereafter furnished to the public. This includes all sources of energy and power. It includes all producers of oil, coal, food, drugs and clothing. Not even a produce farmer could escape regulation by the Commission.

"Insofar as natural gas is concerned, the natural and probable result would be that the producers, in order to avoid regulation by the Public Utilities Commission, would divert their gas from sales to the gas companies for household use to the manufacture of chemicals."

Smaller Cars May Lead To Higher Gasoline Taxes

The strong consumer trend toward small cars was cited today as an indication that those who are pressing for higher and higher gasoline taxes "may be killing the goose that lays the golden egg."

Revenue from highway user taxes may be reaching a point of diminishing returns, Frederick B. Hufnagel, Jr., told a meeting of the Petroleum Association of Georgia.

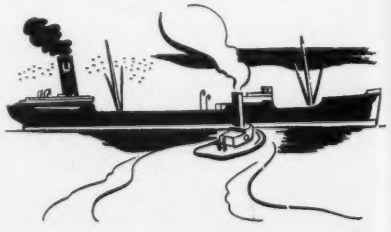
Hufnagel pointed out that there have been 70 increases in state gasoline tax rates since World War II. He added that during the ten-year period ending in 1958 combined state and federal taxes have increased six times as much as the national average retail price of regular grade gasoline, exclusive of taxes.

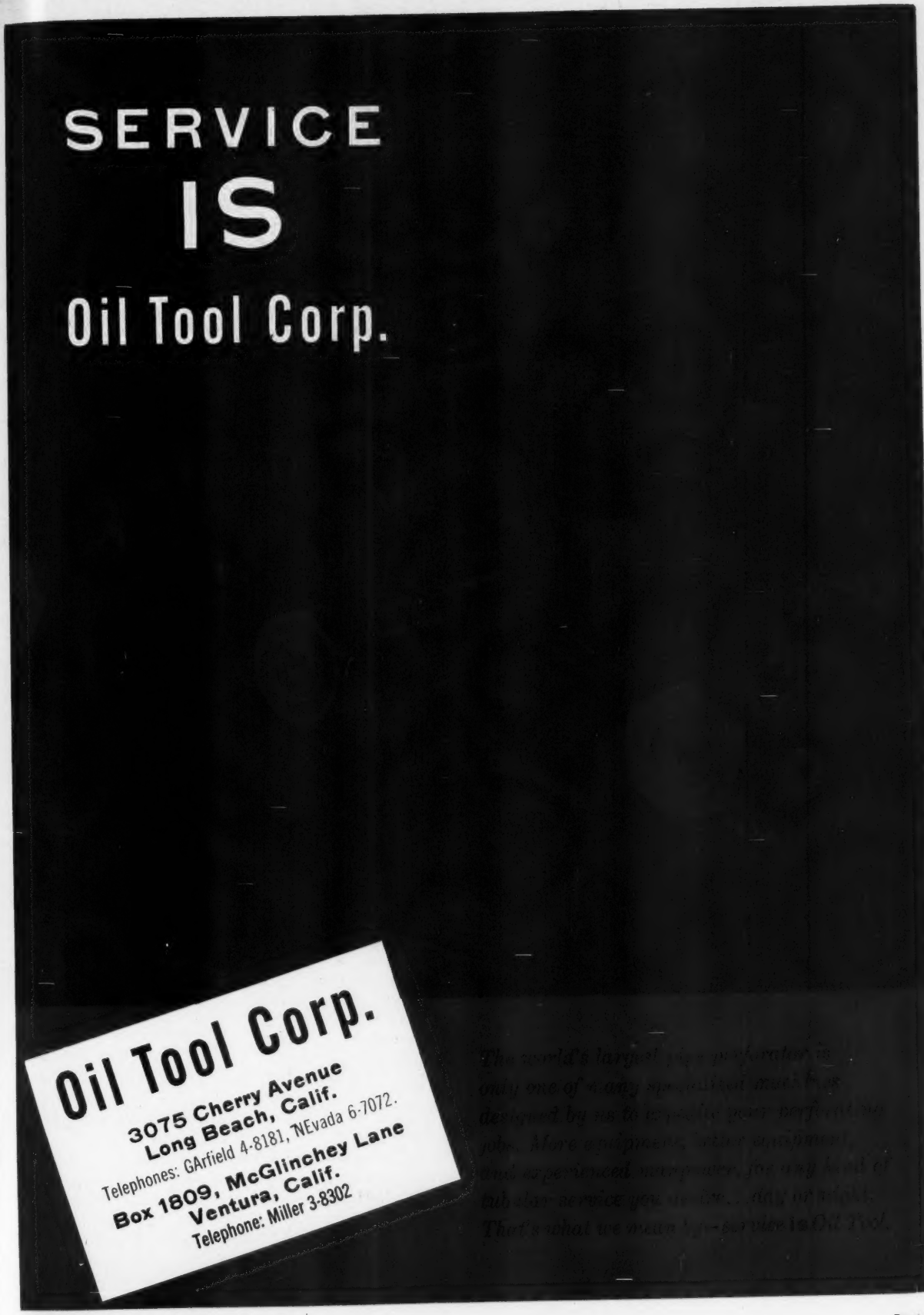
Despite the numerous tax boosts recently effected, pressure for further tax increases continues. In Washington, the House Ways and Means Committee has recommended a one-cent increase in the federal tax.

"I am convinced that ever rising gasoline levies and other highway user taxes and the continued diversion of some of these funds into general treasuries in Washington and in some state capitals will seriously jeopardize the interstate highway program and cause another round of tax increases," he declared.

Hufnagel urged a halt to the diversion of highway user taxes to non-highway purposes and advocated a "stretch-out" of the federal highway building program over a longer period so that it can be financed without further increases in taxes.

"The average citizen is becoming disenchanted with grandiose interchanges, extravagant clover leafs and a mounting tax load," he said.




SERVICE
IS
Oil Tool Corp.
Oil Tool Corp.
3075 Cherry Avenue
Long Beach, Calif.
Telephones: GArfield 4-8181, NEvada 6-7072.
Box 1809, McGlinchey Lane
Ventura, Calif.
Telephone: Miller 3-8302

Personalities IN THE NEWS

Chiksan Names Holladay General Manager of Hamer Division

Maurice E. Holladay has been appointed a vice president of Chiksan Company, Brea, California, and general manager of the firm's newly acquired Hamer Valves Division, it has been announced by **H. J. Hagn,** Chiksan president. Holladay had been vice president and co-manager, with **L. S. Hamer,** of Hamer Valves, Inc., Long Beach, California, prior to the recent purchase by Chiksan of the Hamer firm.

Holladay joined the engineering department of Hamer in 1936 and subsequently became closely involved in the design and production of all products now manufactured by Hamer Valves. He is a registered mechanical engineer. The Hamer line includes plug valves, line blind valves, and gate valves.

Maurice E. Holladay E. W. Casagrande

Shell Chemical Names Manager

E. W. Casagrande has been named manager of Shell Chemical Corporation's Dominguez plant, according to R. C. McCurdy, vice president of Shell Chemical Corporation.

Casagrande replaces **O. M. Williams,** who will become manager of the firm's Denver plant.

The Dominguez plant produces industrial chemicals.

Casagrande, who had been manager of Shell Chemical's Martinez plant since 1954, joined Shell in 1934 as a laborer in the Martinez Refinery. He then held a variety of positions at Dominguez and in Texas, and became superintendent of the firm's Shell Point installation in 1951.

Sperry-Sun Appoints Manager For New Western Division

Harry M. Lowe, a fifteen year veteran of Sperry-Sun Well Surveying Company, has been made division manager and will supervise the activities of Sperry-Sun's new Western Division.

This new division is comprised of the three California offices, Long Beach, Ventura and Bakersfield and the two Rocky Mountain offices, Casper, Wyoming and Durango, Colorado.

Lowe will continue to maintain his office in Long Beach where he has been for the last eleven years supervising the activities of Sperry-Sun's California operations.

New Appointments At Schlumberger

Schlumberger Well Surveying Corporation has announced the appointment of **Milton E. Loy** as manager of the firm's Southeast Area with headquarters in New Orleans. Loy replaces **C. K. Ruddick** who has been moved to Houston as vice president—operations.

Loy started with Schlumberger as a field engineer in California, where he rose through successive management positions to Pacific Coast Area Manager. In 1955 he was named Mid-Continent Area Manager and moved to Tulsa, Okla.

George C. Hepburn, Jr., has been named Northeast Division Manager.

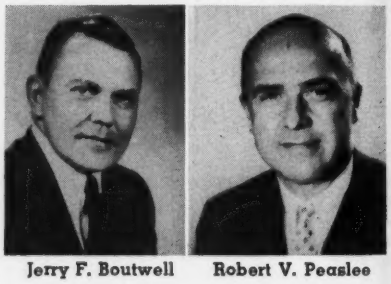
Hepburn moves to his new division offices in Evansville, Indiana, from Bakersfield, California, where he had served as manager of Schlumberger's Pacific Valley Division. He replaces **W. J. Bowen** who has moved to Lafayette, Louisiana, as Louisiana Coast Division Manager.

Boutwell New Oilwell Pump Sales Manager for Byron Jackson

Jerry F. Boutwell has been appointed sales manager of the Oilwell Pump Section of Byron Jackson Tools, Inc., according to **J. T. Carle,** section manager.

Boutwell, who has 12 years of experience in submersible pump sales, will headquarter in Byron Jackson's Tulsa plant.

Byron Jackson Tools, Inc. is manufacturing two basic sub-surface pump products: the Hydralift hydraulic pump and a new submersible pump, the Centrilift.



Jerry F. Boutwell Robert V. Peaslee

Ralph M. Parsons Company Elects Vice President

The election of **Robert V. Peaslee** as vice president of The Ralph M. Parsons Company, engineers-constructors of Los Angeles, has been announced by **Ralph M. Parsons,** company president.

Peaslee, formerly vice president of C. F. Braun & Co., will be located at Parsons' New York office.

Parsons is one of the country's largest firms providing engineering and construction services to the petroleum and chemical industries. In addition, the company is a major designer of guided missile, nuclear engineering, and research and development laboratories, and is active in the fields of ground-water development, and the design and manufacture of electronic instrumentation.

Photographed in the Trianon Room, Sheraton East Hotel, New York, N. Y.

The oilman: big hit in this year's fashion show.

Your wife might be surprised to know just how important your industry is to American women. You and oil helped develop oil-based synthetic fabrics dainty as lace, tough as overalls. Oil-based synthetic dyes that challenge the rainbow. Oil-based treatments that put new life into natural fabrics. The next time you hear somebody start to talk against the oil industry, tell him you're an oilman—and proud of it. And tell him why.

SHELL OIL COMPANY SHELL

J. Howard Marshall Elected Executive V. P. of Signal

J. Howard Marshall has been elected executive vice president of Signal Oil and Gas Company in one of a series of top-level organization changes according to a joint announcement made recently by **Samuel B. Mosher,** chairman of the board and chief executive officer and **Russell H. Green,** president.

Named also as senior vice presidents were **Charles R. Gaylord, W. T. Hancock, R. W. Heath, O. W. March** and **G. L. Young.** All six men named are members of Signal's executive committee.

The office of senior vice president is a newly created position and constitutes an important step by Signal to streamline its organization to meet the ever increasing demands of an integrated independent oil company as it strengthens its position in the world oil markets.

J. Howard Marshall has been a vice president and director of Signal since 1952. He has been in charge of its Exploration Department since that time. For nine years prior he was president and director of The Ashland Oil and Refining Company, and had served as chief counsel and assistant deputy of the Petroleum Administration For War from 1941 to 1944.

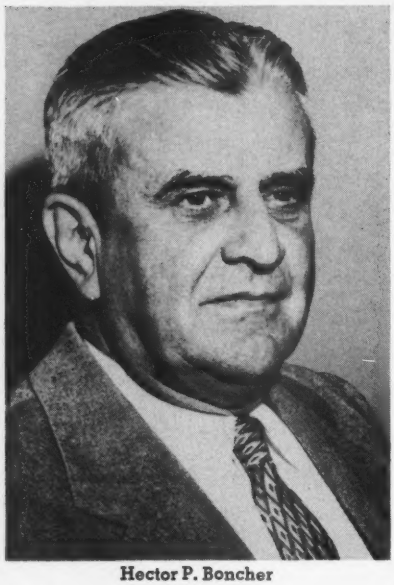
Charles R. Gaylord was a well-known independent oil operator in the Mid-Continent area before joining the Hancock Oil Company in 1958. He has been Vice President and Director of Signal since the merger of these two firms.

W. T. Hancock is Vice President and Director in charge of Manufacturing for Signal and has been connected with the recently merged Hancock Oil Company since 1926.

R. W. Heath is Signal's Vice President and Director in charge of the Gas Department, and has been connected with the Company since 1923.

O. W. March has been a Signal Vice President and Director since 1924, and for many years has been in charge of Signal's widespread retail marketing operations.

G. L. Young has been connected with Signal since 1925, and is a Director of the Company, as well as Vice President in charge of the foreign operations.



Hector P. Boncher

Dresser Appoints Vice-President For Marketing

John B. O'Connor, president of Dresser Industries, Inc., recently announced the appointment of **Hector P. Boncher** as vice president-marketing. Until the present appointment, Boncher has been an operating vice president of Dresser Industries, Inc.

Commenting on the creation of the new position at Dresser, O'Connor said, "This appointment is the first step in a new program aimed at stepped-up sales and marketing efforts in the parent corporation and the divisions. Boncher has long experience in this field and we believe that he is well qualified to spearhead an all-out campaign to boost company sales."

Before his previous appointment as operating vice president of Dresser Industries, Inc. in 1955, Boncher was general manager of Dresser Manufacturing Division, Bradford, Pennsylvania, one of the Dresser Industries. Boncher had been with Dresser Manufacturing Division since 1929. He came up through the ranks of the firm, and was appointed general manager of that company in 1941. Subsequently, in 1955, he moved to Dallas, Texas, to assume his responsibilities as operating vice president of the capital goods divisions. In addition to Dresser Manufacturing Division, this group includes Clark Brothers Company, Roots-Connersville Blower, Dresser-Ideco and Pacific Pumps, Inc.

Hughes Tool Company Names Director for Sales Training

A. H. LeBleu of Houston has been named director of sales training for Hughes Tool Company, according to **M. E. Montrose,** vice president-sales. LeBleu, who joined Hughes in 1937, has been regional special representative in Houston since 1955. He will continue to headquarter in Houston.

LeBleu joined Texaco at Houma, La., in 1930, working first as a roughneck then as a driller on rigs engaged in water operations along the coast of Southeast Louisiana.

After joining Hughes, he served as a field serviceman from 1937 until 1944. He was branch manager at Lafayette, La., for two years, then district manager at Lafayette for nine years before moving to Houston as regional special representative.

Expansion Program Provides New Opportunity for Top Executives at Welex, Inc.

An expansion program designed to provide wider service to the oil industry has resulted in duty changes for seven top executives of Welex, Inc., according to an announcement from the oil well service company's Fort Worth headquarters.

In Fort Worth former Sales Vice President **J. B. Vaughan** was named vice president for Cased Hole Services.

In Houston, **G. T. Armstrong,** vice president and former manager of Research & Engineering, was named vice president for Open Hole Services and named to the Welex Executive Committee. His office will remain in Houston where he will have supervisory status over the Research & Engineering Laboratory. Former Chief Research Engineer **O. R. Smith** has been named manager of Research & Engineering, and the Houston Interpretation Section under Chief Evaluation Engineer **Terry Walker** is now a part of the sales department.

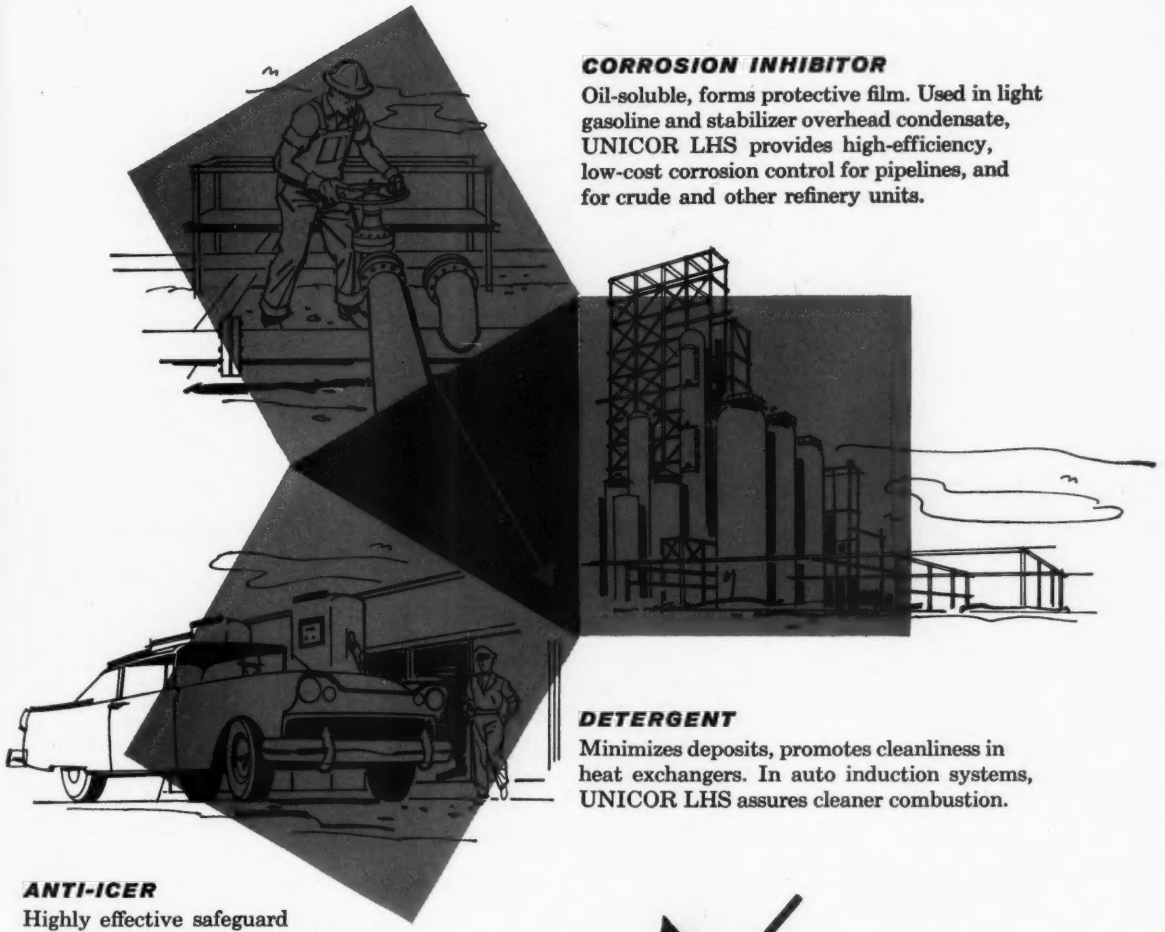
Research & Engineering Vice President **W. J. Greer** will be assisted in handling patents and other legal matters by Research & Engineering Vice President **H. K. McArthur.**

Named to head the Gulf Coast sales organization with headquarters in Houston was **H. B. Hurley,** assistant to the president.

New... ...triple-purpose anti-icer

UNICOR LHS®

provides valuable refinery and pipeline service, too!



CORROSION INHIBITOR

Oil-soluble, forms protective film. Used in light gasoline and stabilizer overhead condensate, UNICOR LHS provides high-efficiency, low-cost corrosion control for pipelines, and for crude and other refinery units.

DETERGENT

Minimizes deposits, promotes cleanliness in heat exchangers. In auto induction systems, UNICOR LHS assures cleaner combustion.

ANTI-ICER

Highly effective safeguard against carburetor icing, prevents stalling. UNICOR LHS is convenient and economical to use, and is instantly miscible in lightest components of winter-grade gasolines.

Get the facts today! Write or phone for information and samples. Address our Products Department.

UOP®

UNIVERSAL OIL PRODUCTS COMPANY

30 ALGONQUIN ROAD, DES PLAINES, ILLINOIS, U.S.A.

West Coast Petroleum Land Institute in L.A. Oct. 8 and 9

More than 200 petroleum landmen from seven Western states are expected to attend the Second Annual West Coast Petroleum Land Institute which will be held October 8 and 9 in Los Angeles, according to Chairman Taylor Hancock, Superior Oil Company.

The two-day conference will be held in the General Petroleum Corporation Auditorium.

Eight speakers will talk on subjects of both current and traditional interest to all persons associated with land work in the petroleum industry, according to Hancock.

Speakers include George W. Abbott, solicitor, Department of the Interior, who will talk on "Development of Oil and Gas Resources in Federal Lands: The Role of the Interior Department"; Richard D. Bergen, attorney, O'Melveny & Meyers, "Legal Problems Incident to Repressuring the Wilmington Oil Field"; James F. Healey, Jr., vice-president and chief title officer, Title Insurance and Trust Company, "Title Practices Relating to Oil and Gas Leasing"; Phil R. Holdsworth, commissioner of natural resources, State of Alaska, "Oil Leasing and Operations in Alaska."

Cyril Hopkinson and Robert W. Sandison, partners, Arthur Anderson & Co., "Leasing and Farm-Out Arrangements from an Income Tax Standpoint"; Dr. Gerald W. Johnson, associate director, University of California Radiation Laboratory, Livermore, California, "Operation Plowshare and the Petroleum Industry"; and A. C. Rubel, president, Union Oil Company of California. The subject of Rubel's talk will be announced later.

Panel Sessions Planned At Annual D. & D.C. Meeting

Three consecutive "buz sessions" on club activities are scheduled for Friday afternoon, October 2, during the 8th Annual Convention of the Association of Desk and Derrick Clubs of North America. In making this announcement, Miss Ellen M. Vaughan, Shreveport, Louisiana, association president, said that these sessions will provide convention-goers an excellent opportunity to become better acquainted with certain club functions and ADDC policies and procedures. Plans for this membership participation program were made by Miss Doris L. Hege, Washington, D.C., chairman, and members of the Association Program Committee.

The panel conducting the session on "Seminars and Special Studies Courses" will be moderated by Lona Mae Forwald, Gulf Oil Corporation, Port Arthur, Texas. Panelists are Frankie Frensley, William P. Luse, Dallas, Texas, and Irma Cline, Petroleum Business Services, Hobbs, New Mexico.

Elouise Norris, Dooley Engineering Company, Oklahoma City, Oklahoma, has been chosen moderator for the panel discussing "Industry Appreciation Night." Other members of the panel are Doris Southall, Standard Oil Company of Texas, Amarillo, Texas, and Judith Hathaway, Plantation Pipe Line Company, Atlanta, Georgia.

The "Public Relations" panel is composed of Peg Grant, Jensen Petroleum Company, Chicago, Illinois, Moderator; Jo Landusky, Velma Petroleum Corporation, Hobbs, New Mexico; and Edna Hurry, Standard Oil Company (New Jersey), New York, New York.

The Hilton Hotel, San Antonio, Texas, will be headquarters for this annual meeting of oil women from the United States, Hawaii and Canada, on October 2-3, 1959.

Oil Producers Agency of California States Position on Cut in Crude Prices

The following wire was sent to the principal purchasing companies in California:

"We are informed that Union Oil Company has cut the price of California crudes by from 10 to 50 cents per barrel, effective September 1, 1959. This cut is in the face of 1958 cuts amounting to as much as 90 cents per barrel and in the face of continuously mounting costs of domestic production, including a 1959 wage increase of some 5%, not to mention whatever additional costs will be imposed when the present steel strike is settled. Our information is that Union Oil Co., attributes the necessity for this action to the plentiful supply of cheap imported oil and its products. Regardless of the merits of this contention, we are convinced that the principal purchasing companies in District V are certainly responsible in part at least for the maintenance of conditions in the industry that will preserve its ability to make the maximum quantity of domestic oil available at all times for reasons of national security. This cannot be done if continous erosion of prices takes place. We therefore urge you, as one of the companies who purchase the bulk of California production, to hold the price line, to the benefit not only of the domestic producer, but through him to benefit the nation itself."

The following wire was sent to Captain M. V. Carson, Jr., Administrator, Oil Imports Program:

"The Union Oil Company has announced a cut of from 10 to 50 cents per barrel in the price of California crudes, effective September 1. In its announcement, the company says that it cannot compete with foreign crudes and the products made therefrom at prices substantially under California crude prices. To us, this means that the surplus of foreign oil in District V has resulted in such a glut that prices have crumbled. Obviously, weak prices result in a weakened industry, and a weakened industry defeats the purpose of the oil import program. Our figures indicate that crude imports are running at the rate of 300,000 barrels per day, with refined imports at about 20,000 per day. This in the face of import allotments of 265,000 barrels per day for both crude and products. The surplus thus approximates 55,000 barrels per day. Exempt Canadian imports are a significant factor in this surplus. We urge that you take whatever steps may be available to you to correct this condition, knowing that your office is concerned with maintaining the health and vigor of the domestic producing industry in the interests of national security.

NEW LITERATURE

Bulletin on New Gasketing Material is Now Available

A new class of gasket materials consisting of "Armalon" TFE-fluorocarbon felts that have been impregnated with "Teflon" TFE-fluorocarbon resin is described in a new technical bulletin.

Properties, potential uses, case histories and availability, together with a table of physical properties, are included in the bulletin.

Impregnated felts of "Teflon" are proving useful as gasketing under extreme conditions.

They will withstand temperatures from below minus 100 degrees to plus 400 degrees Fahrenheit. Capable of withstanding attack by strong acids, they are unaffected by water or any of the common fuels. Since "Teflon" has an extremely low coefficient of friction, felts of "Armalon" may be used as seals and packings in contact with moving parts. Because these materials are relatively soft, they provide durable seals with minimum pressures.

Copies of the technical bulletin may be obtained from the Du Pont Fabrics Division, Fairfield, Connecticut.

100 National Advertisers Up 1958 Advertising Expenditures

The 100 leading national advertisers, including seven oil companies, increased their advertising expenditures 4.6% to $2.3 billion in 1958, compared with $2.2 billion in 1957, Advertising Age reported recently.

Largest advertiser among the oil companies was Standard Oil Co. (New Jersey), which spent $23,000,000, up from $21,000,000 in 1957. The expenditure represented 0.3% of sales.

Second among the oil companies in Advertising Age's annual compilation was Standard Oil Co. (Indiana), with an advertising expenditure of $19,000,000, or 1% of sales, a rise from $18,000,000 in 1957.

Following were Texaco, Inc., with $18,186,095, or 0.8% of sales, up from $17,854,672 in 1957; Shell Oil Co., $16,241,136, or 1% of sales, up from $14,910,600 in 1957; Gulf Oil Co., $12,150,000, or 0.4% of sales, about even with $12,100,000 in 1957; Mobil Oil Co., $11,746,000, or 0.2% of sales, up from $12,600,000 in 1957; and Sun Oil Co., $9,138,000, or 1.3% of sales, up from $6,742,000 in 1957.

The combined expenditure of the seven oil companies totaled $109,461,231, a rise of 6.6% from $103,207,272 spent by these companies in 1957.

Heading the entire list of 100 leaders was giant General Motors, which kept its lead despite a recession-prompted cutback for the third successive year—this time to $137,500,000 from $144,526,000 in 1957.

New Oil Drilling District

By a vote of 11 to 3, the Los Angeles City Council approved the application of General Petroleum Corporation and established an oil drilling district in the Brentwood area. The district is bounded by San Vicente Blvd., Gretna Green Way, Montana Avenue, and the Los Angeles city boundary, and Burlingame Ave., and contains 149 acres.

The City Council also approved an ordinance establishing an oil drilling district in the West Los Angeles area. The 119-acre district is bounded by the north roadway of Santa Monica Blvd., Westholme Ave., Missouri Ave., Holmby Ave., La Grange Ave., Beverly Glen Blvd., Pico Blvd. and Prosser Ave.

Hot Springs for your health
60 miles from Los Angeles in
SAN BERNARDINO, CALIF.
Situated on 1700 acres of woodland—overlooking mountains, vineyards, and lovely gardens. 2,000 feet elevation—delightful year around weather.
Luxurious air-conditioned guest rooms and bungalows. Famous Restaurants, Bar. Outdoor pools, tennis, horseback riding, shuffleboard, etc. 18-hole Golf Course available. Dancing nightly.
World-famous mineral waters and baths.
From $10 per day (European Plan)
FOR RESERVATIONS, PLEASE WRITE TO:
CHARLES KERN, General Manager
Arrowhead Springs
HOTEL and SPA
SAN BERNARDINO, Calif.

JONES
FIRST IN 1894
FIRST TODAY... because we're
Sucker Rod Specialists!
There are four JONES JOB-ENGINEERED SUCKER RODS... a type for every pumping need!
THE S. M. JONES COMPANY
Division of Buffalo-Eclipse Corporation
General Office and Factory: TOLEDO, OHIO
Sales Office: Enterprise Building, TULSA, OKLAHOMA
Export Sales Representatives:
IDECO, One of the Dresser Industries, Dallas—New York
Franklin Supply Company, Export Division, Inc., New York

Sargent Engineering Corp. Re-Elects All Directors

Stockholders of Sargent Engineering Corporation unanimously re-elected all directors of the company at the annual meeting held August 24. Directors are E. J. Sargent, chairman and chief executive officer, S. B. Sargent, president, and G. L. Sargent, secretary-treasurer.

Records of the 1958-1959 fiscal year show Sargent volume and earnings at the highest in the company's thirty-nine year history. Additions of complete heat-treating and plating facilities augment the firm's engineering and manufacturing operations.

Oil tool design and manufacture have been augmented by the establishment of a Systems Division to provide surface equipment and automation for the field treatment in the production of crude oil.

Sargent Aircraft Division has long been identified with hydraulic, pneumatic, electronic and mechanical, research, development and production of missile and aircraft components. Facilities are being expanded to include the systems concept in these areas as well as the hot gas servo-mechanisms, and high temperature research in ball-screw actuators.

Total Petroleum Demand Up Over Same Months Last Year

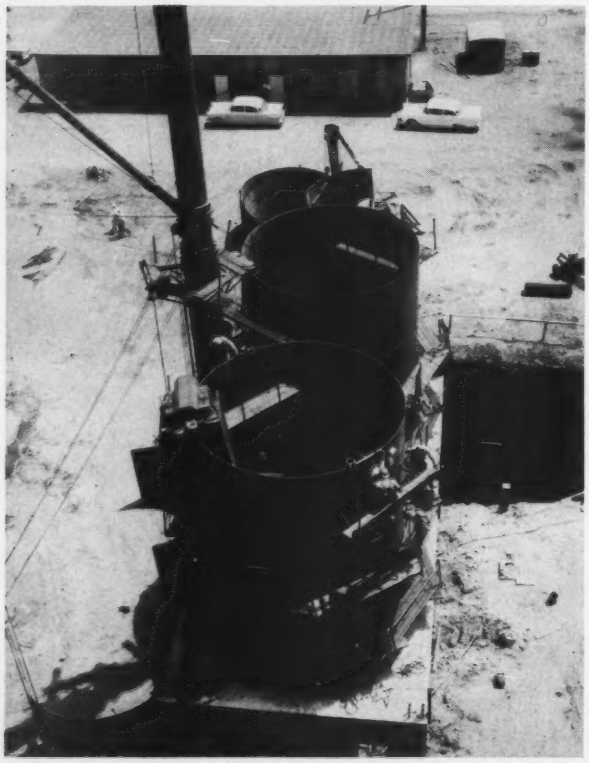
Total petroleum demand during the next three months, September through November, is expected to average about 9,500,000 barrels daily, the Independent Petroleum Association of America said.

The national oil organization stated in its monthly Supply and Demand Outlook that such a demand would be an increase of 350,000 barrels daily or 3.8 per cent over the same months last year. It would also represent an increase of more than 650,000 barrels daily over the total demand of the last three months, May through July.

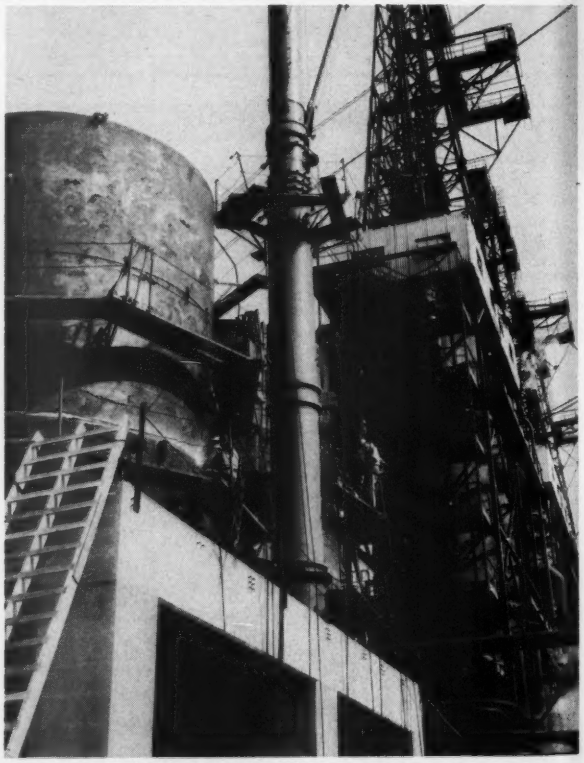
The total demand in the May-July period averaged 8,815,000 barrels daily, an increase of 255,000 barrels daily or 3 per cent over the same period in 1958. However, it was 156,000 barrels daily below previous expectations, the IPAA said, due primarily to a disappointing July—which reflected a slight decline from the June level.

In forecasting the total demand for the next three months, the association pointed out that the extent to which the steel strike will affect petroleum demand during the period cannot at this time be exactly measured. "However," the IPAA stated, "residual fuel oil alone used directly by the steel industry averages more than 100,000 barrels daily. The effect on other industries and consumers of other petroleum products such as diesel fuel and gasoline could become more pronounced if the strike continues. . . ."

The disappointing demand in July also contributed to an already abundant inventory level, the association said, and resulted in the addition of about 5 million barrels to total inventories during the month. Thus at the end of July these inventories were 43 million barrels above the year-ago level and 23 million higher than that forecast by the IPAA Supply and Demand committee last May.



COKING DRUMS BUILT FROM THE GROUND UP. In this bird's eye view of the new coking drums at General Petroleum Corporation's Mobil refinery at Torrance, welders are shown as they put together giant drums which will be a major part of the refinery's new coking unit. The new unit is scheduled for completion in the first quarter of 1960. The drums are 17 feet in diameter

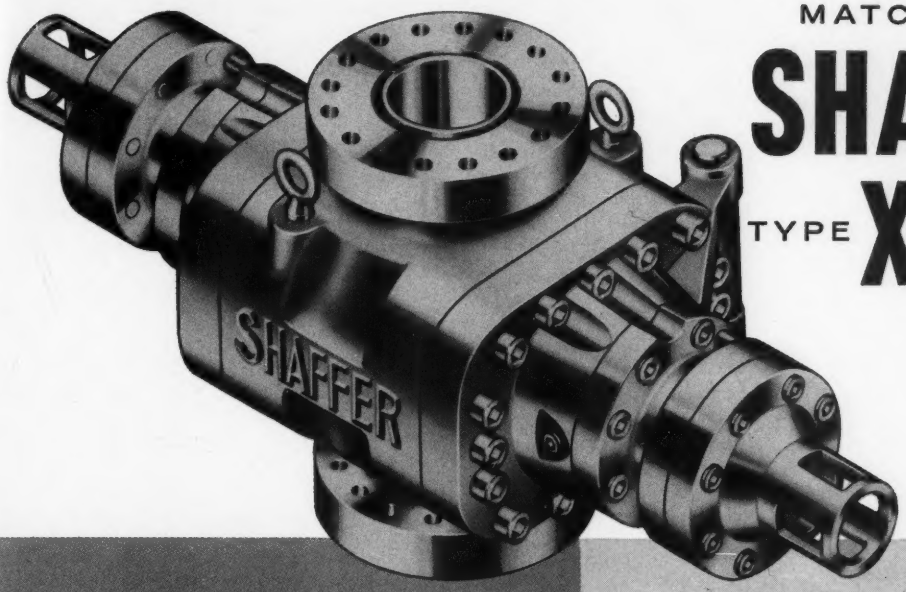


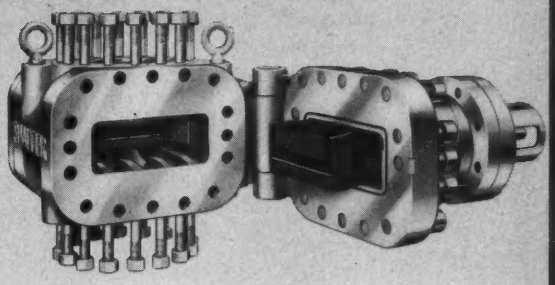
GP COKER EXPANSION UNDERWAY. In this photograph taken from the ground, construction men are working on two drums which are part of the new coking facilities at General Petroleum Corporation's Mobil refinery at Torrance. When completed, the new unit will have a planned throughput of 9,300 barrels a day, increasing refinery's coking capacity to 35,000 barrels a day.

NOTHING in Blowout Preventers

MATCHES THE

SHAFFER TYPE XHP





THERE'S FAR MORE to building a high pressure blowout preventer than just meeting a pressure rating. But if pressure rating is your first consideration, take a look at the kind of *extra high* pressures the Type XHP can handle . . .

- **7-1/16" Bore Size—22,500 PSI Test Pressure, 15,000 PSI Working Pressure!**
- **9" and 11" Bore Sizes—15,000 PSI Test Pressure, 10,000 PSI Working Pressure!**

But That's Only Part of the XHP Story. Although it has an extra high pressure rating, the Type XHP is not clumsy to service nor cluttered in its design.

TO CHANGE RAMS or service the ram compartment you simply unbolt and swing the end doors open. And there's the ram on one side for easy access—the open ram compartment on the other side for checking or service.

Best of all, you don't break hydraulic lines or lose hydraulic fluid each time you open the XHP. Hydraulic lines are built into the body—*and the hinge pins*—for leak-tight operation whether the door is open or closed.

AND, OF COURSE, the Type XHP has such other Shaffer advantages as QUICK-DRAINING RAM COMPARTMENTS, with the rams traveling on guide ribs high above any mud or sand that may collect in the compartment bottoms . . . and COMPLETELY ENCLOSED DESIGN with no exposed operating parts to become jammed or damaged by timbers or objects falling into the cellar.

COMPARE feature by feature and you'll find that nothing on the market equals the Type XHP for high pressure work combined with operating dependability and simple maintenance.

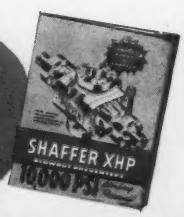
36 years OF OIL TOOL LEADERSHIP

SHAFFER

HIGH PRESSURE DRILLING AND CONTROL EQUIPMENT • FISHING TOOLS THAT EXCEL

SHAFFER TOOL WORKS, Brea, California • California Service Shops: Santa Fe Springs and Taft
HOUSTON, TEXAS, 6006 Navigation Blvd. • ODESSA, TEXAS, 1925 West Second Street
OKLAHOMA CITY, OKLAHOMA, Shaffer Tool Works, 6201 South Shields Boulevard
FARMINGTON, NEW MEXICO, Shaffer Tool Works, Post Office Box 1788
CASPER, WYOMING, Shaffer Tool Works, Post Office Box 827
HOUMA, LOUISIANA, Shaffer Tool Works, Post Office Box 546
EXPORT SALES OFFICE: Shaffer Tool Works, 500 Fifth Avenue, New York, N. Y., U.S.A.

THIS FREE 12-PAGE BROCHURE gives you complete facts and figures on the Shaffer Type XHP. Write or phone your nearby Shaffer representative for your free copy!



Jobs A-Plenty Grew Out of the Birth Of the Oil Industry

A century ago a handful of citizens of Titusville, Pa., witnessed the birth of a great new industry. This was when the first commercial oil well was drilled at the direction of Colonel Edwin Drake on August 27, 1859.

Neither Drake nor his happenstance helpers envisioned that oil would come to be the force running engines and machines and would go into the making of plastics, synthetic rubber and about 2,500 modern products from medicines to mascara.

The week of August 23-30 when oil's Centennial was the occasion for the "Celebration of the Century" at Titusville, tribute was paid to these advances and the better world we live in, thanks to oil.

The rise in uses for oil created a corresponding rise in types of jobs, in ever increasing numbers. Today there are more than 2,000 separate occupations in oil, and the industry itself has become one of this country's great economic forces.

Generally speaking, the industry has four main divisions: production, refining, transportation and marketing. The production end includes oil exploration, and the drilling and running of wells. Geologists, geophysicists, physicists and petroleum engineers are among the specialists contributing to these basic operations.

Refining oil, separating and transforming it into scores of products, calls for the help of chemists and chemical engineers, among others. Workers on pipe lines, barges, ships, railroads and trucks are part of the team transporting oil to the market place. Salesmen, plus more than 181,000 service station dealers in the country, are just a small part of a complex marketing system. Office workers, rigbuilding and drilling crews, maintenance men, gaugers and countless more careerists go into the total make-up of the vast oil industry.

Today there are more than 42,000 enterprising and competitive oil companies. All told, the industry employs well over a million and a half people.

Meanwhile, the industry has been largely responsible for the growth and development of many other major industries: the automotive and petrochemical industries are prime examples. These, in turn, employ additional millions of workers in countless job classifications.

These are opportunities young people should consider as they near the time to embark on careers. There are special courses they can take at schools and colleges to help prepare for rewarding jobs in oil or its allied industries, in the field, the office or the laboratory.

BJ Service Moves Into Bolivia

BJ Service, Inc. has moved into the rapidly expanding South American market with establishment of a new field station in Yacuiba, Bolivia, according to an announcement by John B. Merritt, president and general manager of the oil well service firm.

The Bolivian move marks the second major step in a planned BJ Service program of international growth and expansion, Merritt said. The initial move was completed last September with establishment of a new Canadian oil well service company, BJ Service of Canada Ltd.

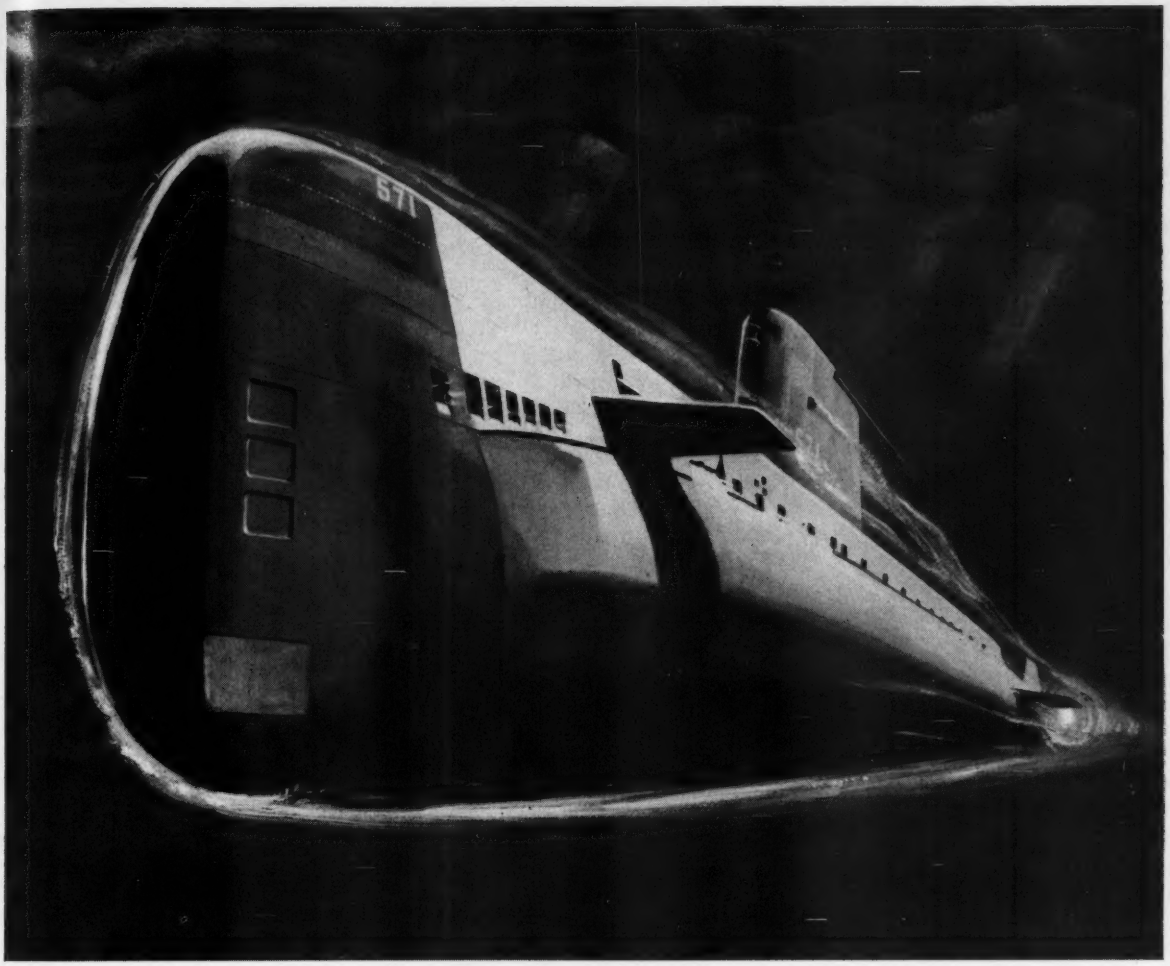
Well service operations are now under way at the Yacuiba station—located just north of the Argentine border—under terms of a contract with the Bolivian Oil Company and its operator, Big Chief Drilling of Oklahoma City. The services of the station are also available to other oil well operators in Bolivia and Northern Argentina, where widespread drilling and production activity is currently being carried on.

Services offered include cementing, fracturing, acidizing and high-pressure pumping. Station manager is Harlen Hagen, long-time BJ Service employee who was formerly field supervisor at the company's field station in Gillette, Wyoming.

The first contingent of well service tools and equipment was shipped from Houston to Buenos Aires by ocean freighter and then trans-shipped by rail across the Andes Mountains to Yacuiba, arriving May 12. Included in the shipment was BJ Service-built "Admiral" high-pressure cementing, fracturing and pumping unit. The unit, designed and manufactured by BJ Service, is especially suitable for Bolivia's high-pressure gas wells, which often reach a total depth of 12,000 to 14,000 feet.

In the near future, several more of the latest-type high-volume pumping units will be shipped from the BJ Service Manufacturing Division to the new Bolivian field station, Merritt revealed. New materials, tools and techniques developed by BJ Service's two major laboratories will also be made available.

New BJ Service "Admiral"—powerful, high-pressure pumping unit



Boron is factor in tremendous cruising range of *USS Nautilus*

Almost daily, in America's research laboratories, scientists are discovering new uses for the unusually versatile element Boron.

For example, Boron contributes to the life of the nuclear core in the *USS Nautilus* and is a factor in the tremendous cruising range of America's first atomic submarine on such voyages as its historic run under the North Pole.

This same element, Boron, in Richfield Boron Gasoline gives your car extra power and mileage!

Richfield Boron is the West's *only* Boron motor fuel. It is guaranteed OVER 100 OCTANE.

Richfield Boron has the special ability to quench those red-hot carbon deposits in your car's combustion chamber that cause pre-ignition—rob your engine of power and performance.

And because every drop burns cleanly and completely, you get more miles to each gallon.

For smooth, knock-free performance and *real driving economy*—YOUR BEST BUY IS BORON! Exclusively at Richfield stations throughout most Western states.

RICHFIELD BORON. GASOLINE

OVER 100 OCTANE

Field Development

Pacific Coast and "4" Corners

LOS ANGELES BASIN

San Clemente Well Testing

After drilling to a total depth of 7992 feet, Humble Oil & Refining Co.'s Clarence C. Reed et al No. 1 has been plugged back to 5934 feet and is running a series of tests. On some of the tests, a small amount of oil was recovered. 4½" casing is cemented at 5934 feet. The test is located in the northwest quarter of Section 35-8s-7w.

Newhall-Potrero Well Deepens

Sunray Mid-Continent Oil Co. is deepening R.S.F. No. 58-6, a field well located in Section 27-4n-17w. The well was first completed by the Barnsdall Oil Co. in 1947 at a depth of 10,298 feet, and will be deepened to the 6th Zone.

Sansinena Well for Union

Union Oil Co. is drilling below 1000 feet on Sansinena No. 5B-84, a proved field well. Surface location of the test is in the southeast corner of Section 30-2s-10w.

Texaco Abandons Castaic Test

Texaco Inc., after drilling and coring to a total depth of 14,034 feet, abandoned Newhall No. F-1 located in the southwest quarter of Section 7-4n-16w, approximately ½ mile southwest of the Honor Rancho field. An electric log was run and sidewall samples taken, but no tests were run on the well.

Elizabeth Canyon Test Suspended

John A. Kochergen has suspended operations on Benson No. 1 after drilling to a depth of 2040 feet. The test is located in the southwest quarter of Section 8-5n-16w.

Towsley Canyon Wildcat Test

The Sun Drilling Co. is ready to spud Lasalle No. 2 located in the southwest quarter of Section 9-3n-16w. The well will be drilled to about 8600 feet. The location falls approximately 900 feet southwest of its Lasalle No. 1, abandoned at a depth of 8025 feet, which logged sands too tight to produce.

Castaic Junction Outpost

Humble Oil & Refining Co. is grading location for N. L. & F. No. 65 in the southwest quarter of Section 13-4n-17w. The location falls on the northerly edge of the field.

Aliso Canyon Field Well

Standard Oil Co. is drilling below 2000 feet on Del Aliso No. 9, a proved field well. The test is located in the northeast quarter of Section 29-3n-16w.

SAN JOAQUIN VALLEY

Midway-Sunset Test Abandons

Richfield Oil Corp. abandoned Belgian Fee No. 10, a field well located in the northeast corner of Section 3-31s-22e, at a total depth of 1700 feet. No tests were made before abandonment.

San Benito Wilcat Test

In the Pimenthal Canyon area, Shell Oil Co. is grading roads and rig site for Shell-Humble-McDonald No. 71X-34 in the extreme northeast corner of Section 34-16s-10e. Location of the test is 3½ miles northwest of the Vallecitos field production and one-half mile west of Shell's Breckenridge No. 31-35 recently completed as a new discovery flowing 6000 mcf of gas per day from the interval 2710-2585 feet.

Mountain View Completion

Union Oil Co. completed Union-Signal-Jewett No. 64-16 flowing 50 b/d of 34.0 gravity oil cutting 3 per cent with pressures of 50/150 psi. Located in the northeast quarter of Section 16-31s-29e, the well reached a total depth of 9387 feet.

Guijarral Hills Recompletion

Sunray Mid-Continent Oil Co. recompleted Fred Smith No. E86-34F flowing 1159 b/d of 30.6 gravity oil cutting 1.2 per cent. First completed in 1949 by the Barnsdall Oil Co. at a depth of 8790 feet, the well was deepened to 10,513 feet and plugged back to 10,290 feet. A 5" blank liner was cemented at 10,509 feet and gun perforated from 10,246-10,217 feet. The well is located in the southeast quarter of Section 34-20s-16e.

North Bellevue Discovery

Atlantic Oil Co. completed Atlantic-Humble-Sledge et al No. 1 as a New Pool Discovery flowing 175 b/d of 33.0 gravity oil cutting 1 per cent through a 10/64" bean with pressures of 725/150 psi. Production is from the Stevens Sand within the interval 6754-6722 feet. Located in the northwest quarter of Section 35-29s-26e, ½ mile north of the Bellevue field, the well was drilled to 6936 feet and cemented 7" casing at 6800 feet.

Fresno County Test Abandoned

In the Helm area, R. B. Montgomery, Operator, abandoned Rheem-Noble No. 21-X9, a field well, at a total depth of 7025 feet. No tests were made on the well, located in the southwest quarter of Section 10-17s-18e.

Midway-Sunset Shallow Completion

Producing Properties, Inc. completed C.W.O.D. No. E-3-17 pumping 16 b/d of 14.5 gravity oil cutting 8 per cent sand and mud. The well, classified as a New Pool Discovery, was drilled to a total depth of 695 feet and cemented 7" casing at 465 feet. Located near the west quarter corner of Section 17-32s-23e, the Spellacy Sand was logged from 465-695 feet.

Second Pioneer Area Test

Standard Oil Co. has staked location for KCL-44 No. 45, a follow-up to its recent discovery. The new well is located in the southwest quarter of Section 32-11n-22w and is a southeast offset to its KCL-44 No. 34, recently completed within the interval 3995-2983 feet, as a new field discovery, producing from the Pioneer Sands of the Saucesian age.

Vallecitos Field Completion

Shell Oil Co. completed F. & I. No. 39-31, a field well, pumping 349 b/d

FORMATION PACKER SHOE
OPERATING DIAGRAM

FORMATION PACKER SHOE
CASING SWIVEL

CEMENT YOUR FUTURE... WELL!

WITH THESE HALLIBURTON CEMENTING TOOLS

HALLIBURTON FORMATION PACKER SHOE AND COLLAR used in casing cementing helps to protect exposed low pressure formations or any formation below the casing... minimizing subsurface problems... helping to attain maximum future oil production.

Halliburton Formation Packer Shoes offer these outstanding advantages when installed on the first joint of a string of casing:

- Helps protect the pay zone from cement contamination in low-pressure formations while cementing, as Packer when expanded packs off open hole below casing.
- Floats in and guides the casing to bottom.
- Halliburton Super-Seal Back-Pressure Valve above slotted cementing ports helps keep cement slurry in place with no backing-up inside the casing.
- Circulation of fluids is provided through end of Shoe until shoe packer rubber is expanded and set.

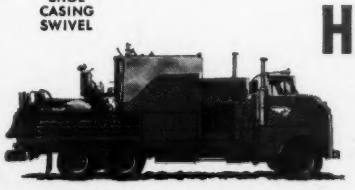
This Formation Packer Shoe is used in all areas where conditions require casing to be set on top of producing formation. All internal parts are constructed of high impact phenolic plastic for fast, easy drilling.

Halliburton Formation Packer Collar is similar in design, casing size, hole size, application and setting operation to the Formation Packer Shoe... providing multiple uses in cementing casing.

- Installed on casing above shoe joint, helps protect a lower formation from cement contamination while cementing.
- Several joints of casing or liner may be installed on lower end of Packer Collar; packer is set and cement pumped down casing and out through slotted cementing ports into annulus above expanded packer.
- Used in setting liners, perforated pipe and screen in salt water disposal wells, water flooding projects and in fields where "Full Hole" cementing is desirable.
- Designed to support 40, 400 to 114,000 lbs. suspended below packer collar depending upon O.D. size required.

Put your well on a solid foundation... specify Halliburton Formation Packer Tools to help solve specific problems in oil well cementing. Write for a copy of new brochure number S-8025.

HALLIBURTON SPECIAL PLUG AND BAFFLE SET... may be placed one or more joints above Packer Shoe in a Casing Collar in the string to stop the top cementing plug. A Special Bottom Plug is pumped down through the Baffle to Setting Cage and applied pressure ruptures the plug diaphragm to establish circulation through plug and cementing ports... Top plug is pumped down on top of the cement slurry and shut-off on the baffle.



HALLIBURTON CEMENTING SERVICES

HALLIBURTON OIL WELL CEMENTING COMPANY • DUNCAN, OKLAHOMA

"A WELL WORTH CEMENTING IS WORTH CEMENTING WELL"

of 36.0 gravity oil cutting 13 per cent. Located in the southeast quarter of Section 31-16s-11e, the well was drilled to a total depth of 3835 feet and cemented 5½" casing at 3913 feet. The casing was jet perforated at intervals from 3745-3505 feet.

Mountain View Extension Test

Verde Enterprises, Operator for Ancora Corp., is drilling below 3000 feet on Union-Signal-Ancora-Tipton-Stockton No. 42-35. The test, to be drilled to approximately 8500 feet for a test of the Derby Sand, is located near the north quarter corner of Section 35-31s-29e south of the Arvin area production.

Helm Completion For Atlantic

Atlantic Oil Co. completed Summit Lake No. 1, a southeast extension test of the Helm field, flowing 160 b/d of 35 gravity oil cutting 0.1 per cent through a 8/64" bean. Located in the southwest quarter of Section 19-17s-19e, the well was drilled to a total depth of 7200 feet and cemented 7" casing on bottom. Casing is perforated opposite the Lower Zone from 7177-7166 feet.

South Greeley Wildcat Test

Verde Enterprises, Operator for Ancora Corp., is drilling below 7125 feet on Fisher-Harbaugh No. 13-29, an extension test of the field. The well, located in the northwest quarter of Section 29-29s-26e, will be drilled to approximately 8000 feet for a test of the Upper Stevens sands.

Guijarral Hills Test Abandons

Lloyd A. Harnish & Associates abandoned Kast-Spieler No. E8-26F at a total depth of 10,510 feet. This was an extension test, located in the southwest quarter of Section 26-20s-16e. Top of the Guijarral Hills Eocene Sand was logged at 10,250 feet and top of the Hondo Siltstone at 10,505 feet.

Fruitvale Outpost Abandoned

Ferguson & Bosworth abandoned G.P.-KCL No. 38-20 at a redrilled depth of 4497 feet. Originally drilled to a total depth of 5005 feet, the hole was plugged back to 2540 feet and redrilled directionally. The test was located about 3200 feet west of production, in Section 20-29s-27e.

Mountain View Well Redrills

Honolulu Oil Corp.'s Harper-Sabovich No. 41, an outpost test of the field, after reaching a total depth of 7865 feet has been plugged back and is setting the fourth whipstock to redrill and straighten the hole. The test, located in the southwest quarter of Section 5-31s-29e, will be drilled to approximately 10,500 feet to test the Vedder Sand.

Wheeler Ridge Well Redrills

Richfield Oil Corp.'s KCL No. 36-36 located in the southwest quarter of Section 36-11n-20w, after drilling to a depth of 8165 feet has abandoned the lower portion of the hole and has been plugged back to 5235 feet to redrill and test an upper sand logged at approximately 5600 feet.

Union Fruitvale Completion

Union Oil Co. completed KCL No. 23X-17 pumping 83 b/d oil cutting 3 per cent sand and water. Located near the west quarter corner of Section 17-29s-27e on the westerly edge of the field, the well reached a total depth of 4215 feet and cemented 5½" casing at 4211 feet. Casing is perforated from 4211-4178 feet.

Buena Vista Deep Test

Tidewater Oil Co. is drilling below 10,775 feet on Buena Vista Associates No. 22-11 located in the northwest corner of Section 11-32s-25e. The well is six miles east of the Buena Vista Hills field production and will be drilled to approximately 12,000 feet as a Stevens Sand test.

North Dome Well Tested

Artnell Company, Helm Company and Robert Sumpf are drilling ahead below 11,500 feet on S. O. Co. Fee No. 42-13 after recovering 1000 feet of oil and a small amount of water on a test of the interval 11,165-11,273 feet. 500 feet of water and mud were recovered from the interval 11,060-11,125 feet. The test is located near the north quarter corner of Section 13-21s-16e on the northwest plunge of the Kettleman Hills field.

Alpaugh Test Idle

Pacific Central Company has temporarily suspended operations on Pacific Central-Roller No. 1 after drilling to 2100 feet. The test is located in the northwest quarter of Section 20-23s-23e.

Fresno County Test Spuds

In the Westhaven area, Standard Oil Co. spudded Haven-Boston No. 313 and is drilling below 8000 feet. Location of this 14,000 foot test is near the west quarter of Section 23-20s-18e.

NORTHERN CALIFORNIA

Beehive Bend Field Well

Richard S. Rheem, Operator, has awarded a contract to the Brown Drilling Co. to drill Zumwalt No. 5-63, located in the southeast quarter of Section 3-19n-2w.

Tehama County Test Abandoned

Western Gulf Oil Co. abandoned J. I. McClintock No. 1 after drilling and coring to a total depth of 6360 feet. Electric and sonic logs were run. The test was located five miles southeast of the Kirkwood Gas area in the center of the northwest quarter of Section 36-23n-3w.

Buttes Gas and Oil Company's Saldubehere No. A-4 drilled to a total depth of 5460 feet and was plugged and abandoned. An electric and sonic log were run on the well, located in the southeast quarter of Section 25-24n-3w, ¼ mile northwest of South Dome production.

Honolulu Abandons Gas Test

In the Llano Seco area in Glenn County, Honolulu Oil Corp. abandoned Rabo No. 1 after drilling and coring to a total depth of 3500 feet. The test was located four miles east of the Llano Seco Gas area in the southeast quarter of Section 6-19n-1e.

Capay Canal Test Abandoned

Rinde Oil Co. abandoned its Yolo County test, Stephani No. 1, at a total depth of 3979 feet. No tests were run on the well, located in the southwest quarter of Section 28-9n-1w three miles north of the Pleasant Creek Gas field.

Texaco Gas Completion

Texaco Inc. completed Dye No. 1, an extension test of the River Island field, flowing 1000 mcf of gas per day through a 9/64" bean with pressures of 900/1200 psi. Drilled to a total depth of 5000 feet, the hole was plugged back and 4½" casing cemented at 3324 feet. Casing was gun perforated opposite the Nortonville-Eocene formation from 3168-3151 feet and 3129-3141 feet. The well is located in the northwest quarter of Section 2-4n-4e in Sacramento County.

National Flame Arrestor on a Steam Generating Production Unit

Prevent Disaster with . . .

National® Flame Arrestors

PROTECT LIFE AND PROPERTY ON YOUR LEASE!

❶ Stops all flame propagation outside of the firetube on which the unit is installed.

❷ Withstands any explosion inside the tube.

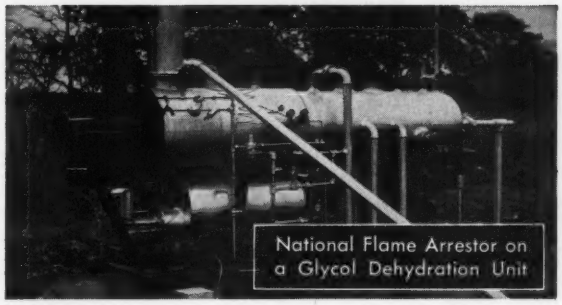
❸ Prevents any flash from going through the element.

❹ Welded, heavy steel construction. (No castings to crack in case of rapid or uneven cooling in event of rain, snow, sleet, etc.)

The National-designed Arrestor has been field and laboratory tested, proven, accepted and in use over a long period of time under extreme climatic conditions; in service on offshore platforms in the Gulf Coast with hurricanes, rain, wind and salt spray; in service in Canada where temperatures drop to —50° F with snow, ice and wind.

Available in two types for installation on all existing fired production units. Both types can be supplied with push-button pilot lighters or the automatic robot pilot.

A. The push-button pilot lighter in conjunction with the arrestor enables the lease operator to manually light the pilot in the firetube with no danger of flash back or explosion.


National Flame Arrestor on a Glycol Dehydration Unit

B. The automatic robot pilot will automatically light the pilot with no attending personnel and will automatically shut off the gas supply in case of failure of any part of the burner system.

Install National Flame Arrestors on existing equipment and specify National Flame Arrestors on all future purchase of field equipment to insure maximum safety for life and property.

THE NATIONAL FLAME ARRESTOR CONTAINS THE PROPER ARRANGEMENT OF ALL NECESSARY COMPONENTS TO MAKE A PERFECT ARRESTOR — ANY LESS IS POSITIVELY INADEQUATE AND DANGEROUS . . .

Contact your nearest National Tank Company representative for more detailed information.

It's a National®

NATIONAL SALES COMPANY

SUBSIDIARY OF NATIONAL TANK COMPANY

LOS ANGELES
928 Roosevelt Bldg.
727 W. 7th St.
Phone MA 2-9119

BAKERSFIELD
1425 Union Avenue
Box 1593
Phone Fairview 2-2270

VENTURA
536 East Meta Street
P. O. Box 1771
Phone Miller 3-5514

Glenn County Extension Test

In the Beehive Bend area, Bradley, Muhl and Johnson are drilling below 2000 feet on Shuman No. 1, an extension test located in the northwest quarter of Section 20-19n-1w. The test is ½ mile east of production and will be drilled to 5000 feet. Donald M. Smith is doing the engineering.

San Joaquin County Test

Texaco Inc. is grading rig site for Canal Ranch Unit One No. 1 located in the southwest quarter of Section 24-4n-4e. The well will be drilled to approximately 10,000 feet and is three miles east of River Island gas production.

Solano County Gas Test

In the Dixon area, Honolulu Oil Corp. is grading location for Gill No. 1, a 5500 foot test in the southeast quarter of Section 2-7n-1e, four miles southeast of the Winters Gas field.

Denver Operator to Drill Near Tracy

Signet Operating & Exploration Co. of Denver, Colorado will drill McMullen No. 1, a wildcat gas test, in Section 23-6s-6e. Location for the test has not been surveyed. Located seven miles east of the Tracy Gas field, the well will be drilled to 7000 feet and W. S. McBurnie will do the engineering.

La Honda Completion

Neaves Petroleum Developments completed Neaves-Union-Burns No. 2, an extension test, pumping 45 b/d of 16.6 gravity oil cutting 0.2 per cent. The well was drilled to a total depth of 1563 feet and cemented 5½" casing on bottom.

Brown Abandons River Island Test

E. C. Brown abandoned M & T No. 1 after recovering a small amount of gas on a test of the interval 2062-2053 feet. The test, located in the northwest quarter of Section 34-4n-4e in Sacramento County, was drilled to a total depth of 5000 feet before testing.

Willow Pass Deeper Pool Test

Trico Oil and Gas Co. is drilling below 1500 feet on Neustaedter No. 1 located in the northwest quarter of Section 16-2s-1w. The well, to be drilled to approximately 6000 feet as a deeper pool test, is 4000 feet northwest of the Willow Pass Gas field where the company has three producing wells.

New Field Discovery for G.P.

General Petroleum Corp. completed Moda Unit-A-54 No. 10 as a New Field Discovery flowing 5800 mcf of gas per day through a 54/64" bean with flow pressures of 390/690 psi. With the bean reduced to a 32/64", the flow was 4400 mcf per day. 25 feet formation is open to production. Located in the northeast quarter of Section 10-22n-2w, ten miles south of Corning in the Hamilton City area, the well was drilled to a total depth of 5898 feet and cemented 5½" casing at 1864 feet. Cement was cleaned out to 1818 feet and casing perforated from 1735-1710 feet.

Rio Vista Recompletions

Brazos Oil & Gas Company recompleted Gardiner No. 3 in the Nortonville Zone flowing 1600 mcf of gas per day through a 15/64" bean with a flow pressure of 1260 psi. Located in the southeast quarter of Section 26-4n-4e, the well was first completed in 1949 at a total depth of 4651 feet flowing 3000 mcf of gas per day. Present perforations open to production are at intervals from 3863-3718 feet. Gardiner No. 5, located in the northwest quarter of Section 36-4n-3e, also perforated the Nortonville Zone at intervals from 3825-3761 feet, and was recompleted flowing 1700 mcf of gas per day through a 15/64" bean with 1325 psi flow pressure. The well was plugged from its original depth of 4705 feet back to 3997 feet.

San Joaquin County Test

Standard Oil Co. and E. L. Doheny have staked location for H. D. Towne No. 1 on the southwest quarter of Section 36-5n-4e in the East Thornton area. The test is approximately ½ mile easterly from Standard Oil Co.'s recently completed McCormack-Williamson No. 4 flowing 2850 mcf of gas per day from the interval 3697-3707 feet.

Arbuckle Test for Occidental

Occidental Petroleum Corp. has graded a rig site for Clooney No. 1-16, a wildcat test, located in the northeast quarter of Section 16-13n-2w one mile southwest of the Arbuckle Gas field.

Glenn County Well Abandoned

In the West Perkins Lake area, Kenneth Sperry abandoned Smith No. 1 at a total depth of 7100 feet. An electric log, sonic log and dipmeter were run before abandoning. The test was located in the southeast quarter of Section 12-20n-2w, three miles west of the Perkins Lake Gas field.

Yolo County Test Abandons

Three miles east of the Millar Gas field, Amerada Petroleum Corp. abandoned Vaughn No. 1 at a total depth of 10,400 feet. An electric log was run and a series of tests made before abandoning. Location of the well was in the northeast quarter of Section 5-6n-3e.

Southeast Vernalis Test

Porter Sesnon et al and Great Basins Petroleum Co. are preparing to drill South Block Unit One No. 47-31 near the southwest corner of Section 31-3s-7e in Stanislaus County.

River Island Test

E. C. Brown is grading location for Wilson-McCall No. 1 in the northwest quarter of Section 27-4n-4e in Sacramento County.

COASTAL COUNTIES

Ojai Field Test

Haney & Williams are drilling below 1000 feet on Barnard No. 1, a proved field well, located in the southwest quarter of Section 12-4n-22w. Terminal Drilling Co. is drilling this 1500 foot test.

Simi Shallow Test

Ventura Drilling Service is preparing to move in equipment to drill Patterson Ranch No. 2 for the Federal Oil Company. Location of the test is in the southwest quarter of Section 36-3n-18w.

Southeast Saticoy Test

G. E. Kadane & Sons will drill a wildcat test on Section 34-3n-21e, southeast of the Saticoy field. The exact location has not been surveyed.

San Miguelito Well Abandoned

Continental Oil Co. abandoned Grubb No. 201, a deep test of the field, after drilling to a total depth of 14,194 feet. Logs and tests were run on the well, located in the southwest quarter of Section 24-3n-24w.

Bardsdale Field Well

Kenneth H. Hunter is grading location for Robertson No. 4 in the northeast quarter of Section 12-3n-20w. Surface location of the well is ten feet north of well No. 3 now being completed from a depth of 3981 feet.

Padre Canyon Recompletion

General Petroleum Corp. recompleted Padre No. 52 from a plugged depth of 5654 feet pumping 140 b/d oil cutting 17 per cent water. Located in Section 15-3n-24w, the well was first completed in 1953 from a depth of 4360 feet. The well was deepened to a total depth of 5960 feet and plugged back to 5654 feet. 5" casing is cemented at 4858 feet.

Rincon State Lease Completion

Honolulu Oil Corp. completed State 429 No. 12 pumping 165 b/d of 30.0 gravity oil cutting 5 per cent sand and water. Located in the southwest quarter of Section 7-3n-24w, the well was drilled to a total depth of 3743 feet and was plugged back to 3045 feet. 9⅝" casing is cemented at 2925 feet.

Rincon Island Test

Richfield Oil Corp. is starting State 1466 well No. 57 on the man-made island offshore from Rincon in projected Section 13-3n-25w. Well No. 28 on the Island has drilled to a total depth of 4180 feet and is logging.

Santa Barbara County Wildcat

Three miles north of Buellton, Morgan Brown Oil Co. abandoned Laranjo No. 1 after drilling to a total depth of 3005 feet. The test was located on Lot 17 of the Rancho Santa Rosa in Section 8-6n-32w and was drilled by Camrich Drilling Co.

Gaviota Well Pumping

Martin Bertagnole's Teapot-Fox No. 1, after sand frac'ing has been returned to production pumping 20 b/d of 18 gravity oil cutting 12 per cent. The well is producing from the fractured Rincon Shale. Located in the southeast quarter of Section 31-5n-32w, total depth is 3050 feet with 5½" casing cemented at 3041 feet and perforated at five intervals within 2918-2299 feet.

Ventura County Wildcat Test

In the Fillmore area, Franco Western Oil Co. is grading rig site for Standard-Thorpe No. 1-6 located in the northeast corner of Section 6-3n-20w. The test, to be drilled to about 12,000 feet, is two miles north of the South Mountain field.

Sespe Field Well

James A. Lewis is preparing to drill Tar Creek No. 53, a field well, located in the northwest quarter of Section 28-5n-19w.

OTHER AREAS

Arizona

E. B. La Rue has staked location for a 7300 foot Devonian test on a farmout from the Zapata Petroleum Co. Navajo No. 1 will be located in the northwest quarter of Section 18-40n-28e in the East Boundry Buttes area, Apache County.

J. M. Fraser of Fraser Enterprises, Soda Springs, Idaho, is preparing to drill State No. 1 in the southeast quarter of Section 19-21s-23e in Cochise County, between Tombstone and Bisbee, Arizona.

Texas-American Oil Corp. has received a permit to drill Fitzgerald No. 2, a 3500 foot Dead River Structure test, to be located in the southeast

Pacific's
speedy, One Stop
Pipe Slotting and
Threading Service
Save time, take all your pipe slotting and threading requirements to one convenient location. Get the complete job at Pacific. Pipe slotting, fine-gauge, straight and keystone, in patterns to your specifications. Pipe threading, Ventura Tool "Flush Joint", A.P.I. "Round" and "V" threads.
Be specific — call Pacific
Pacific PERFORATING CO., Inc.
Main office and plant: Torrance, California
FAirfax 8-6787 • NEvada 6-5789
For prompt efficient service in:
Bakersfield FAirview 2-4390
Taft ROger 5-4426
Ventura MIller 3-5959
Coalinga Wells 5-2262

quarter of Section 22-20n-25e in Apache County, south of the Navajo Indian Reservation and just north of Highway 66.

Pan American Petroleum Corp.'s Aztec Land & Cattle Co. No. B-1 on Section 9-16n-18e in Navajo County, midway between Holbrook and Winslow, drilled to 3936 feet and has been abandoned.

Cottonwood Oil Company has staked location for Well No. 1, a 3000 foot test in the northwest quarter of Section 20-16n-4e in Yavapai County, about thirty miles southwest of Flagstaff.

Texas Pacific Coal & Oil Company, with Pure Oil and Monsanto Chemical Co., have staken location for Navajo Tract 190 No. 1, a 7000 foot Cambria test in the southeast quarter of the southwest quarter of Section 20-40n-26e in Apache County.

In Navajo County in the Snowflake Anticline area, Lydia Johnson is preparing to drill a second test, a 1750 foot Fort Apache Limestone test.

Washington

Tideland Oil & Gas Company's Carlisle No. 1 in the southeast quarter of Section 23-20n-12w, Grays Harbor County, drilled to 3596 feet and is being completed. A formation test of the interval 3392-3541 feet, open 1 hour, recovered 700 feet of gas-cut mud and 20 feet of estimated 40-45 gravity oil.

Wyoming

H. W. Thompson, President of Westates Petroleum Company, and J. W. Liddell, Vice President and Rocky Mountain Regional Manager of Continental Oil Company, announced jointly the sale by the Hamilton Dome Oil Company, Ltd., a wholly owned subsidiary of Westates, of one-half interest in its Hamilton Dome properties to the Continental Oil Co.

These properties include 25 wells presently producing 1250 barrels of oil per day in the Hamilton Dome Oil Field, Hot Springs County, Wyoming, which is located twenty miles northwest of Thermopolis, Wyoming.

Hamilton Dome Oil Company has been appointed as operator of the properties and announced that drilling operations have already started on 13 additional wells to be drilled the next 18 months. Remedial operations will be undertaken at once on some of the existing wells. Increased production is expected from this development.

Nevada

Petroleum Engineering Co. and Bonanza Oil Corp. has suspended operations on Government Consolidated No. 1 at a total depth of 3282 feet. The test is located in Clark County in the southwest quarter of Section 31-21s-60e.

Canada

The First International Symposium on Arctic Geology, sponsored by the Alberta Society of Petroleum Geologists, Calgary, Alberta, Canada, will be held January 11-13, 1960. For further information write to D. W. R. Wilson, General Secretary, Arctic Symposium Committee, P. O. Box 100, Calgary, Alberta, Canada.

Signal-Eastern States Merger Approved By Stockholders

Stockholders of Signal Oil and Gas Company recently voted overwhelmingly to merge The Eastern States Petroleum and Chemical Corporation into Signal Oil and Gas Company on the basis of one share of Signal Class A stock for five and one-twenty/fifth shares of Eastern States. This action followed by one day the unanimous approval of the merger by the stockholders of Eastern States, according to an announcement made jointly by Samuel B. Mosher, Russell H. Green, and Eastern States Chairman of the Board, R. B. Kahle.

The oil company heads said they expect the merger to become effective soon following routine legal procedures. Mosher will remain Chairman of the Board and Chief Executive Officer and Green will continue as President of Signal. Kahle and R. N. Blaize, President of Eastern States, will become Vice-Presidents and Directors of Signal.

Authorized capital for Signal will continue to consist of 22 million shares of Class A Common and 3 million shares of Class B Common (voting stock). At present Signal has 7,791,-111 shares of Class A Common and 883,032 shares of Class B Common stock outstanding. Eastern States has 1,260,000 shares issued and outstanding.

Upon the completion of this merger, Signal will acquire a complete 60,000 barrels-per-day refinery, a petro-chemical plant and a research center located in Houston, Texas; as well as deep-water marine terminals and an interest in the Rancho Pipeline which extends from West Texas to Houston.

Four New Wells Completed By Sunray-Midcontinent

Sunray Mid-Continent Oil Company has completed four new wells on its Maxwell Government Lease in the Midway-Sunset Field, Kern County, California. Initial production ranged from 65 to 90 B/D of 11 gravity crude and the wells are now averaging 60 b/d each. Producing formation is the Potter Sand.

The four wells, Maxwell 27, Maxwell 28, Maxwell 29 and Maxwell 30, are located on the 106-acre lease held jointly by Sunray and Berry Oil Company of San Francisco. Prior to the new completions there were 21 producing wells on the lease, averaging 10,500 barrels of production per month.

Crude Imports

Foreign crude imports, at prices reportedly up to 75¢ per barrel and more under California crude prices, are responsible in large part if not wholly for the present deterioration in the California crude price structure, according to Stark Fox, executive vice-president of Oil Producers Agency of California.

"The pressure of this foreign supply has resulted in cancellation of contracts to purchase California crudes, and in distress prices of as much as 70¢ per barrel under posted prices," Fox said.

The real danger in crumbling California crude prices, according to Fox, is that they will result in stagnation of the oil producing industry here. This is exactly what the present oil import control program was instituted to prevent, he said.

"The Federal government has found that a healthy and vigorous domestic oil industry is essential to national security. It has also found that excessive imports would impair that industry. The present situation gives clear evidence that imports are impairing the domestic industry. This situation calls for immediate corrective action by the appropriate Federal agency, the Oil Import Administration," Fox said.

A significant factor in the imports picture on the Pacific Coast is the volume of Canadian oil coming by pipeline into the northwest. From a rate of about 23,000 barrels per day earlier in the year, these imports have jumped to about 60,000 barrels per day.

Lane-Wells Opens New Oilfield Service Station

Lane-Wells Company, a division of Dresser Industries, Inc., has opened a new technical oilfield service location in Atwood, Kansas. The new station will offer all the company's newest developments in perforating, nuclear logging, Vibro-Frac, packers and bridging plugs. Charles Farr, formerly with the company at Stockton, Kansas, will be Operating Engineer-in-Charge of the new location. Farr, with more than eight years of experience as an operator and supervisor of oilfield services, is thoroughly familiar with the growing needs of the oil industry in the area.

In making the announcement of the new station, Charles O. Ohl, district manager of Lane-Wells' Great Bend, Kansas District, stated that the new location is part of the company's expansion program to make its modern oilfield services more convenient for operators in areas where the industry is growing as well as in established fields.

The new station will serve Northwest Kansas and South Central Nebraska. Atwood is one of five offices in Kansas which comprise Lane-Wells' Great Bend District. This is the largest of the company's thirty-three districts.

"Oil To The North"

(Continued from page 3)

in conjunction with 10 other oil companies, recently completed a seismic survey of the Cook Inlet. This survey, by the way, cost more than a million dollars. Results will be shared by all the participants, but each will interpret the findings separately and set his own estimation of the possibilities of offshore drilling in the Inlet. We'll have a pretty good idea of what the oil companies think of this prospect in just a few weeks, when bidding for tracts in the Inlet takes place.

On shore, nine crews representing various companies are presently doing geophysical work in southern Alaska, and some 30 geological parties will be out in the field during the course of this year's prospecting season.

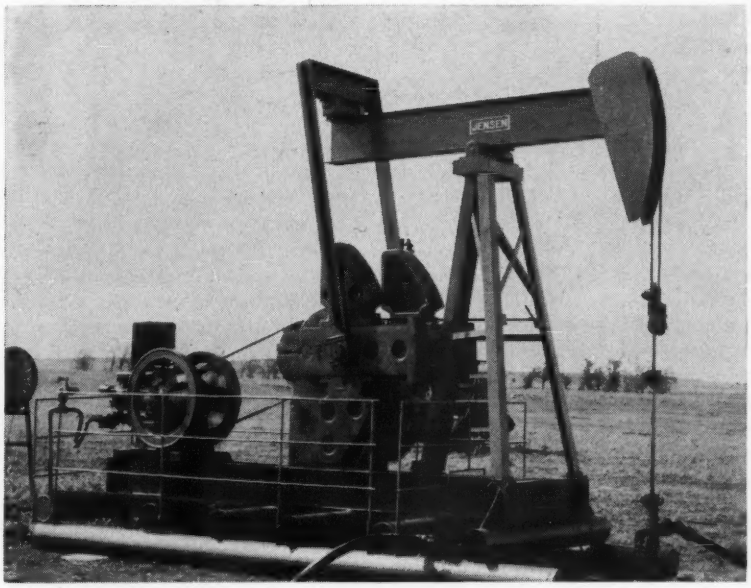
All of this, I believe, adds up to a rather vigorous effort to investigate Alaska's oil possibilities, not merely in already proved areas but everywhere that the geological indicators are favorable.

Now as to the production picture, which determines the State's royalties, production from our three successful wells on the Swanson River Unit is presently about 650 barrels a day. This is about all that we are able to handle under the present system of trucking the oil to Seward, for storage there and ultimate shipment to our refinery at Richmond, California.

I know you'll be interested to know that we're studying various plans for constructing a line to move Swanson River oil to tidewater, when that move seems justified economically. The most practical of these plans seems to be a line from Swanson River over to the Cook Inlet. That is the shortest possible route to an all-weather port.

I might point out that this line, since it would cross public land, would have a common carrier status by law and any other companies finding production along the way would have the right to be connected and use the line to get their crude to the coast.

Naturally we will have to take a look at the results of wells now drilling,



BALANCE with JENSEN!

It's a simple one-man job to balance a well with a JENSEN Rotary Balanced JACK. Moreover, you're more likely to **keep** a well in balance the easy, accurate JENSEN way. Equipment above and below ground lasts longer and runs better on JENSEN-equipped wells.

There are 13 sizes in these famous orange and gray JENSEN JACKS —money-savers for wells to 7500 feet.

JENSEN JACKS are built **to make wells more profitable.** For your information and your files, write NOW for the whole story.

STOCKED BY YOUR LOCAL SUPPLY STORE

Made by JENSEN BROS. MFG. CO., INC., P.O. Box 477-C, Coffeyville, Kansas
Export Office: 250 Park Ave., New York 17, N. Y.

JENSEN JACKS

and others to be drilled in the months to come, before we can come to any definite decision on a project as sizable as this pipe line. But I can assure you we're studying the situation closely and will go ahead with the plan just as soon as our engineers and analysts tell us the line can pay its way.

Now to move on to another point of interest. Development of Alaska's oil resources necessarily requires the utmost cooperation and encouragement from Government, both State and Federal. In this connection, it is particularly gratifying to observe that high-ranking public officials of the State are demonstrating a sound awareness of what is needed to stimulate and maintain exploratory activity and resulting development and production.

We have had several outstanding examples of this awareness in recent weeks. First, there is the new State petroleum law, which is a credit to Governor Egan and the legislature. State Senator Irene Ryan and the members of the Natural Resources Committee, and Mr. Phil Holdsworth, the Commissioner of Natural Resources, deserve particular commendation for their part in drafting this act. The new law provides for holdings of individuals or companies of up to 500,000 acres, both on shore and offshore. This is a rather important provision, one that is quite fundamental to the incentives necessary to stimulate oil exploration in Alaska.

For far too many years, it seems to me, the administration of oil lands by the Federal Government has been pervaded by a philosophy that it is somehow bad for any one individual oil operator or company to lease more than a few hundred thousand acres. As a result, once all interested parties take leases up to the maximum permitted, the rest of the unleased land lays fallow, so to speak. It makes no difference that there are no other takers for the remaining land; the law says you can lease just so much and no more.

Only a few months ago the Bureau of Land Management in Alaska made a check of companies which had reached their maximum acreage under lease. It found one hundred companies or individuals were in that status. I think it's reasonable to assume that very few other companies aren't bumping their heads against this ceiling.

In my opinion this has held back the progress of oil development in Alaska, and that is why we of the oil industry are encouraged by the new State petroleum law.

Along with this matter of acreage limitations, oil development in Alaska has also been hampered to a considerable degree by land withdrawals and restrictions prohibiting exploration in areas where certain wildlife abounds. The one which comes most readily to mind is the Kenai National Moose Range, within which is located the Swanson River Unit. A sizable part of this reserve remains closed to geophysical studies, and one can do little more than speculate on the potential of this land that lies so close to Alaska's only commercial production.

Our company is wholly in accord with the concept of wildlife preservation; and let me stress that we practice this as well as talk about it. Our crews in the field are instructed to operate in a manner which will not disrupt the normal course of events in wildlife areas. We have done this on the Kenai Peninsula and I can tell you, from the first-hand experience of our people, that co-existence between moose and oilmen is entirely feasible.

In the light of this experience, I am hopeful that the rest of the Moose Range, and other areas of similiar oil potential, will ultimately be opened to oil exploration. I think it would be tragic if any potentially productive area in Alaska were left untested, when oil production in the State is so badly needed. I am totally convinced that all such areas could be examined, without harm to the resident wildlife, by responsible companies which are ready and willing to take the special pains necessary.

I might also mention, in connection with this matter, that we of the oil industry here in Alaska and elsewhere have been deeply disturbed by the implications of the Wilderness Bill which has been pending in Congress. This bill would withdraw vast areas of Alaska from further prospecting, when what is needed, from the standpoint of oil development, is quite the opposite. I am sure most Alaskans agree with me, and the exemption of Alaskans areas from this bill is certainly in order.

While we are less concerned with the effects of this bill elsewhere than here in Alaska, it seems to me the whole idea of sealing off wilderness areas from human intrusion is subject to critical examination. Our industry, and others, have demonstrated that multiple-usage of wilderness lands is practicable and provides the maximum benefit to society. I fail to see how we can be better off, as a people, by denying ourselves access to potentially rich deposits of oil and other minerals when they can be produced without harm to the land itself.

Before I leave this general subject of Government's role in Alaskan oil, I want to give appropriate credit to Senator Bartlett for his keen understanding of the oil depletion issue. You will remember that in recent sessions of Congress there has been a determined effort by some Congressmen to reduce or eliminate the percentage depletion tax provision, which is a direct stimulus to exploratory activity. Senator Bartlett from the beginning recognized the importance of this provision to his State's fledgling oil industry and he continues to support it vigorously. At such time as Alaska's oil industry reaches the profitable point of development we all hope it will, Senator Bartlett can justly claim his share of the credit.

Well, gentlemen, there you have my views on Alaska's oil future, a view in which many of us in the oil industry concur at this moment. What we see is a picture clouded by present problems and past failures, but illuminated by cautious hopes. It is a rapidly changing picture, as the results of the wells being drilled at this very moment modify the plans being made for tomorrow.

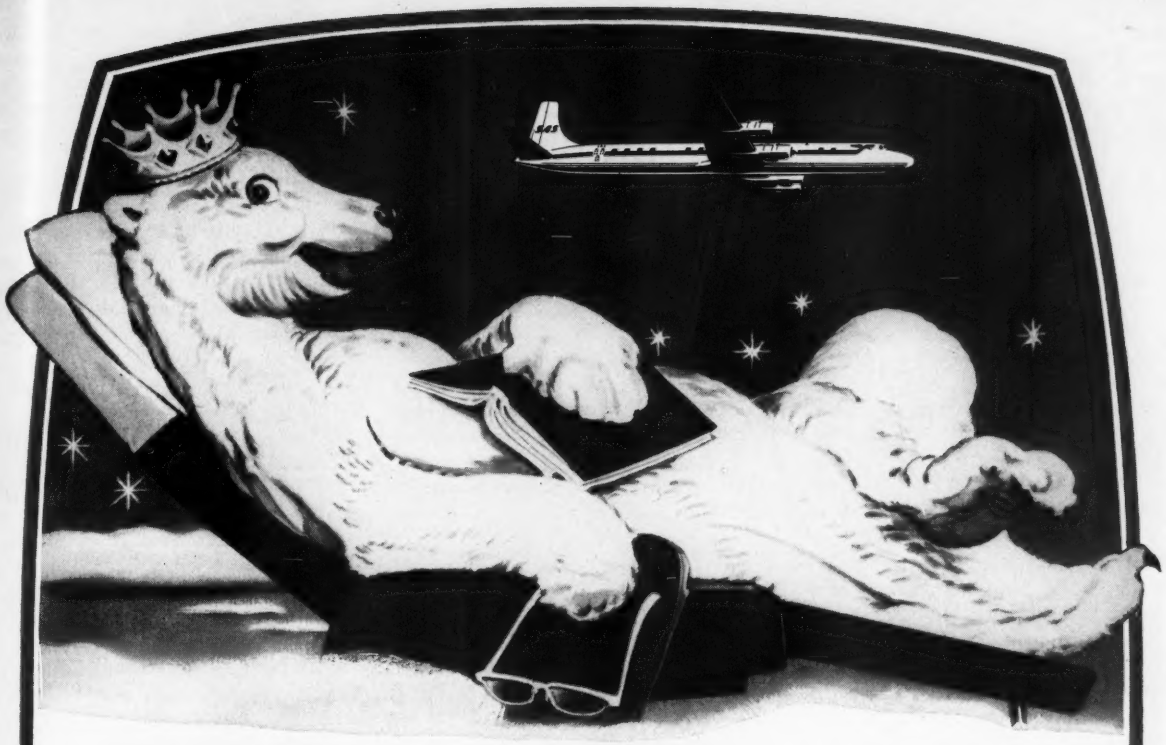
I wish it were possible for me to be wholly optimistic about this picture. But you, as I, are realistic businessmen, I am sure; you want no part of false optimism.

I can say this, with complete confidence:

We of the West Coast petroleum industry need oil of good quality in reasonable proximity to our markets. The discovery of sizable commercial deposits of oil in Alaska would be welcomed as eagerly by the West's oil industry as by Alaskans themselves.

We are looking for this oil—intensively. We have no illusions about this being a difficult, often discouraging, and extremely costly task that may take years to fulfill. We do not want Alaskans to harbor any illusions about this. But if the oil we seek is there—whether it's on the Kenai, or the Cook Inlet, the Copper River Basin, the Yakataga area, or any of the many potentially productive areas of this great new State—we oilmen intend to find it.

Thank you.



TIME SAVER!... *Fast, direct connections to the Middle East via SAS Polar Route.*

On *SAS,* you save from hours to an overnight stop as you fly the polar route directly to Copenhagen, then make fast direct connections to all the Middle East. And you enjoy *SAS* luxury all the way – Continental cuisine, spacious berths, regal service – with famed DC-7C Royal Viking de Luxe at your service across the pole.

Fly SAS CALIFORNIA TO COPENHAGEN, ROME, ALL EUROPE... BAGHDAD, ABADAN, TEHERAN, BASRA, ALL THE MIDDLE EAST... AND ALL THE FAR EAST.

CONVENIENT MIDNIGHT SAS DEPARTURES from Los Angeles give you a whole day at the office, then plenty of time to pack and get to the plane conveniently.

STOP OVER AT EXTRA CITIES at no extra fare, including London, Paris, Rome, Copenhagen, on your *SAS* round trip. Perfect for business or pleasure.

VISIT THE TAX-FREE COPENHAGEN GATEWAY STORE for extraordinary buys in famed whiskys, liqueurs, cigars. This store is at the airport.

FIRST OVER THE POLE

SAS

SCANDINAVIAN AIRLINES SYSTEM

The Global Airline

See your Travel Agent or call *SAS*

OLeander 5-8600
or OLympia 2-8600

8929 Wilshire Blvd., Beverly Hills

Beverly Wilshire Hotel, Beverly Hills

607 West Sixth Street, Los Angeles

THIS LAUGH OFF!!

A Texas oilman visiting in Pittsburgh made a phone call and screamed his head off when the operator told him the charge was 60 cents.

"What?" he roared. "Back in Odessa, Texas, I could talk to hell and back for 60 cents!"

"Maybe so," the operator replied. "But from Odessa that would be a local call."

The lady was visiting a mink farm . . . Wishing to display her profound interest in the fur business she asked brightly, "And how many mink skins do you get from each animal?"

"Only one, lady," was the response . . . "If we try to skin them twice it makes them nervous."

"I thought your doctor told you to stop all drinks."

"You don't see any getting by me, do you?"

Did you hear about the guy who disliked work so much that he thought Manual Labor was a Mexican.

A supervisor in charge of complaints at the telephone company received a call from a new subscriber. "I have much more phone cord than I need and it gets in my way. I wondered if you would mind pulling in some of it from your end. I'll tell you when to stop."

Young lady was shopping for furniture.

"What," asked the decorator, "is the motif—modern, French Provincial, Early American?"

"Well," she replied, "we were married only recently, so I guess you could call our furniture sort of Early Matrimony—some of his mother's and some of my mother's."

"Sir, do you have an opening in this office for a smart young man like me?" asked the job applicant.

"Yes, we do," said the office manager, "and please don't slam it on your way out."

"He's a psycho-ceramic."

"What's that?

"A crackpot."

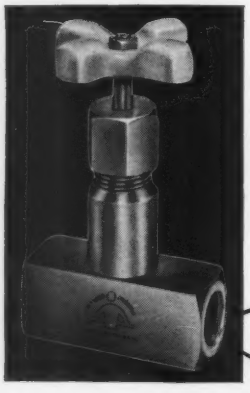
The reason a great number of families doesn't own an elephant is that they have never been offered an elephant for a dollar down and a dollar a week.

One friend said to another, "Say, how did you get that scar across the bridge of your nose?"

"From glasses."

"Well why don't you get contact lenses?"

"They don't hold enough beer!"

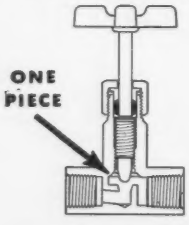


MARSH
Needle Valves

MAXIMUM WORKING PRESSURE 10,000 PSI

. . . for finer regulation of water, oil or gas

First needle valve to combine all the characteristics called for in modern industry. Embodies sturdiest basic construction—machined from solid bar stock—suitable for pressures to 10,000 psi and equally efficient in lower range. Note stem guide fused to body by new "Conoweld" process, eliminating faults of conventional two-piece valves. Stem 416 stainless steel. Stem threads fine pitch for strength and micrometer regulation. Body electro-zinc plated. Sizes ⅛" to 1", globe and angle patterns.



Ask for new Needle Valve Catalog

MARSH INSTRUMENT COMPANY

Division of Colorado Oil and Gas Corporation. Dept. 41, Skokie, Ill.
Marsh Instrument & Valve Co. (Canada) Ltd., 8407 103rd St., Edmonton, Alb., Can.

OIL WELL DRILLING CONTRACTORS

•

MODERN GAS AND DIESEL POWERED RIGS

•

DEPTHS TO 12,000 FEET

•

EXPERIENCED SUPERVISION

A. D. Rushing, Inc.

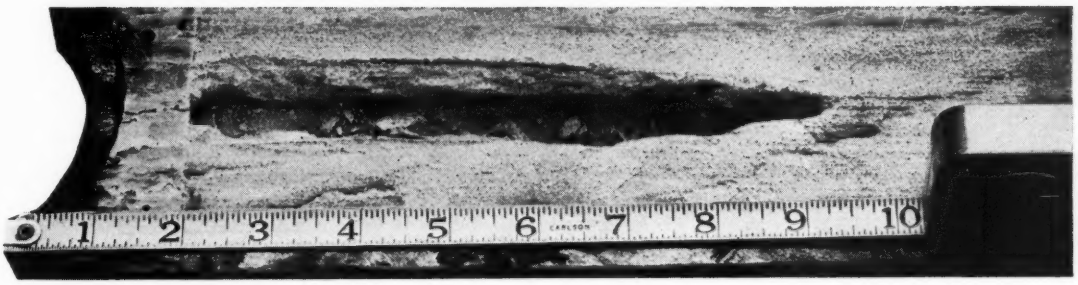
—Oil Well Drilling Contractors—

1452 HARVARD BLVD., P.O. BOX 232
Santa Paula, California
Phone JAckson 5-3301

NOW TRUE "CARROT-FREE" PERFORATING

LANE-WELLS NCF KONESHOT®

NON CARROT FORMING



Top Performance Too!

In addition to attaining true "carrot-free" perforations, NCF Koneshot delivers the highest published flow rates of any casing-type shaped-charge perforator on the market. Because of its unique design, this charge simply *cannot form a trace* of a carrot . . . and test after test has proved there is no plugging due to liner deposits in the hole. Nothing is left to restrict the flow through the deep large-diameter channel. These facts are substantiated by an average W.F.I. of 1.39 — the highest average flow rate published for any casing-type perforator. These tests were made on regular production-line charges now available in the field.

When considering perforators, examine data on penetration, hole size, drainage area and carrot formation. But remember, not *one*, but *all* of these factors affect results. Then compare the W.F.I. (Well Flow Index) to see if your choice is confirmed by measured performance. Your Lane-Wells man will be glad to go over these figures with you, including the remarkable production data already available on the new NCF charge.

LANE-WELLS COMPANY
A DIVISION OF DRESSER INDUSTRIES, INC.
P. O. BOX 1407, HOUSTON 1, TEXAS

true resistivity is unique in oil-finding methods

R_t

Today, thirty years after Schlumberger pioneered Electrical Logging, True Resistivity measurements still provide the only logging methods of finding and computing oil saturation in the reservoir.

That's why, through the years, Schlumberger has endeavored to eliminate from resistivity measurements the effects of the borehole, mud invasion, and beds adjacent to the one under study.

Long-Spacing Electrode Curves, Laterolog, and Induction Log are all Schlumberger developments for True Resistivity Logging. Whether you are drilling in soft or hard formations, thin beds or thick, salt muds or fresh muds, one of these logs has the answers for you.

- *Is the Formation Oil or Gas Bearing?*
- *Is the Saturation Sufficient for Production?*

You will make the right decision more often when you base it on True Resistivity from a Schlumberger Log. Your Schlumberger engineer is trained and qualified to select the right program for you.

THE EYES OF THE OIL INDUSTRY®

SCHLUMBERGER

1. *Flushed zone (R_{xo})*
2. *Invaded zone (R_i)*
3. *Undisturbed zone (R_t)*